

ADDENDUM

Date Issued:	January 26, 2026
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Project:	Intermountain Health Riverton Hospital GI ASC 374 W 12600 S Riverton, UT 84065
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Addendum Number:	2
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<p>The Contractors submitting proposals on the above-captioned project shall be governed by the following addendum, changes and explanations to the drawings and specifications and shall submit their bids in accordance therewith.</p>	
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Item Number	General Items Description
1	<p>Q. Regarding the integral blind windows, there is no specific verbiage about lead glass in note 08.03 on the interior elevations or on the window schedule in detail 4 / A601A. However there is note 09.02 on the OR Enlarged Plans on sheet A401 calling for lead lined walls that encapsulates the window. Please verify that window type 1 in OR 2 requires lead lined glass. And that the window in OR 1 will not require lead glass.</p> <p>A. Provide lead lined glass unit and lead lined hollow metal frame for OR 2 window. See attached sheets A401, A402, A601A. No lead lined glass or lead lined frame is required for OR 1 window.</p>
2	<p>Q. The plans call out to match existing ceiling tile. Can you please provide what the existing ceiling tile is?</p> <p>A. Existing ceiling as Ultima Heath Zone. See attached sheet A603A.</p>
3	<p>Q. Unicel does not offer a lead lined perimeter frame. They can provide an aluminum frame that is not lead lined with an insulated integral blind unit with lead equivalent glass in it. Another option would be to have a lead lined Hollow metal frame provided by others and we would only provide the insulated integral blind unit with lead equivalent glass. Please advise how to proceed.</p> <p>A. For window in OR 2, provide lead lined glass unit and lead lined hollow metal frame. See attached sheets A401, A402, A601A.</p>
4	<p>Q. On the insulated lead equivalent integral blind units, the thumbwheel or crank handle operator for the blinds can only be installed on the opposite side of the lead glass. There will be no way of operating the blinds from the OR side. Please verify that this is acceptable.</p> <p>A. This is acceptable. Provide thumbwheel operator on corridor (non-OR) side.</p>

5	<p>Q. We are unable to complete the One-Line without the location of the following equipment: Distribution Board HIDHIC, Panelboard H1H2C. Please provide location for H1DH1C and H1H2C.</p> <p>A. See Electrical Addendum #02</p>
6	<p>Q. Equipment Some items are listed on the plans but are not found in the schedule, can the schedule be updated to reflect these items if were are to supply and or install them or be excluded 1. RV-1 2. RV-2 3. HC-1 4. HC-2 5. SV-1 6. SV-2 7. OR-1 8. OR-2.</p> <p>A. See Mechanical Addendum #02.</p>
7	<p>Q. Some sheets have been updated to shown a new wall between the clean and dirty. Sheet 124 A and 127A are missing the wall. My question is the door that goes in between these spaces what's it's number? Is it in the door schedule. Also, does it need an auto opener. In the past we have added them for ease of transporting the scopes.</p> <p>A. See updated sheets A124A, A127A. The door in question, between the clean and dirty rooms, is A204A. No auto-opener is required.</p>

Sheet Number	Drawings
Architectural Drawings	
A124A	Revise layout, wall and door tags, as indicated. This is the layout which was revised in Addendum #01 but this sheet was missing from that addendum.
A127A	Revise layout and finish tags as indicated. This is the layout which was revised in Addendum #01 but this sheet was missing from that addendum.
A401	Revise keynotes, window and elevation tags as indicated.
A402	Revise keynotes as indicated.
A601A	Revise sheet name as indicated. Revise door hardware groups and comments as indicated. Revise window types 4/A601A as indicated. Add detail 7/A601A as indicated.
A603A	Revise ceiling finish, "C2" as indicated.
Mechanical Drawings	
	See Mechanical Addendum #02
Electrical Drawings	
	See Electrical Addendum #02

Specification
Section

Project Manual

Architectural Sections

08 7100

Update door hardware sets as indicated.

Attachments:

A124A, A127A, A401, A402, A601A, A603A, Mechanical Addendum #02, Electrical Addendum #02, Specification Section 08 7100

RESOLUT

**CORPORATE OFFICE
SALT LAKE CITY**

181 E 5600 S
Murray, UT 84107
T 801 530 3148

ST. GEORGE

230 N 1680 E
Building V
St. George, UT 84770
T 435 674 4800

LOGAN

40 W Cache Valley Blvd.
Building 1, Suite B
Logan, UT 84341
T 435 752 5081

ARIZONA

1602 S Priest Drive
Suite 103
Tempe, AZ 85281
T 480 889 5075

SPOKANE

101 W Cataldo Ave.
Suite 205
Spokane, WA 99201
T 509 919 3403

Date: 1/21/26

Project No: 25232.00

Project: RVTN GI - ASC

Revision: Addendum #02

Addendum - The following revision, additions, deletions, and/or items of clarification shall hereby be included as an integral part of the Contract Documents for the above-listed project and shall be fully binding. All other requirements shall remain in effect of the original plans and specification.

DRAWINGS**Sheet: M600 – Mechanical Schedule**

- Updated basis of design for CD2, CD3, and CD4.

PRIOR APPROVALS

<u>Item</u>	<u>Manufacturer</u>	<u>Comments</u>
Test and Balance	Building Control Systems	Approved
Hydronic Air Coils	Precision Coil	Approved
Laminar Flow Diffuser w/Integral LEDs	Price	Approved

End of Addendum.



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Electrical Addendum #1

Date: January 26, 2026
To: Robert Howell
Company: NJRA Architects
Job: Riverton GI ASC
Job No: 250514
Cc:

From: Jason Worthen
Email: Jason.worthen@speceng.com
Phone: 801-834-9973
Re:

This Addendum shall be considered part of the Contract Documents and Project Manual for the above mentioned project as though it had been issued at the same time and shall be incorporated integrally therewith. Where provisions of the following supplementary data differ from those of the original Contract Documents and Project Manual, the Addendum shall govern and take precedence.

Questions

1. We are unable to complete the One-Line without the location of the following equipment: Distribution Board HIDHIC, Panelboard H1H2C. Please provide location for H1DH1C and H1H2C

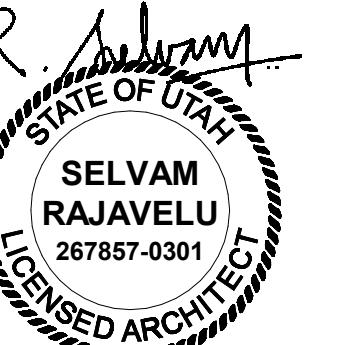
H1DH1C is no longer being used, the A section of the isolation panels will now be fed from 2H1C which is shown on the plans. H1H2C is located in the first floor electrical room directly below the electrical room shown on sheet EP101A.

Drawings

1. EP601 – One-Line Diagram
 - a. Revised one-line to feed isolation panels from a closer panel.

END OF ADDENDUM

Attachments < EP601 >



KEYED NOTES

09.03 PATCH ALL WALLS TO MATCH EXISTING LEAD SHIELDING

09.03 PATCH ALL WALLS TO MAT

A circular seal for a licensed architect in Utah. The outer ring contains the text "LICENSED ARCHITECT" at the bottom and "STATE OF UTAH" at the top, both in a stylized font. The inner circle contains the name "SELVAM RAJAVELU" and the identification number "267857-0301". The initials "R.J." are handwritten above the seal.

GENERAL NOTES

- A. SEE SHEET G003 AND G005 FOR SYMBOLS, GENERAL NOTES AND LEGEND.
- B. SEE SHEET A505A FOR CABINET LEGEND.
- C. SEE SHEET A601A FOR DOOR SCHEDULE.
- D. SEE SHEET A602A FOR WINDOW SCHEDULE.
- E. SEE SHEET A603A FOR FINISH SCHEDULE AND GENERAL NOTES.

KEY PLAN

Riverton Hospital

GI - ASC

3741 W 12600 S
Riverton, UT 84065

JRA Project # 25232.00
construction Documents Nov. 17, 2025
Addendum #2 Jan. 6, 2026

Dimension Plan Level 2 - Area A

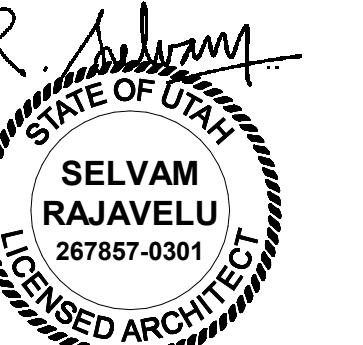
A124A

1 Dimension Floor Plan Level 2 - Area A

SCALE: 1/4" = 1'-0"

1/26/2026 3:37:44 PM

1/26/2026 3:37:44

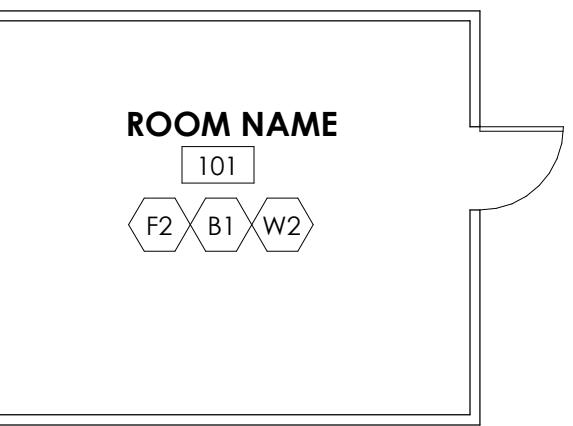


KEYED NOTES

NJRA Architects, Inc.
5223 S. Ascension Way, Suite 350
Murray, Utah 84123
801.364.9259
www.njraarchitects.com

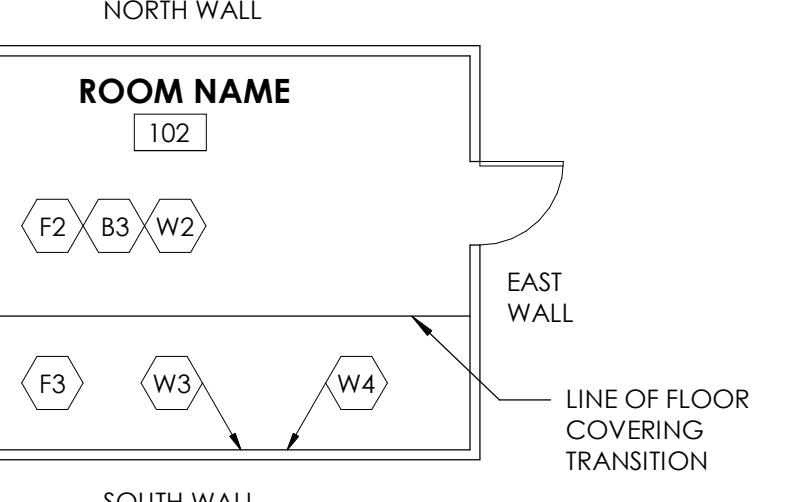
SAMPLE LAYOUTS

SAMPLE LAYOUT 1



NOTE: AS INDICATED IN ROOM NUMBER 101, MAJORITY OF THE ROOMS IN THE PROJECT SHALL HAVE A SINGLE TYPE OF FLOOR FINISH, WALL BASE AND WALL FINISH. WALL FINISH INDICATED AS "W2" SHALL APPLY TO ALL FOUR WALLS FROM FLOOR TO CEILING.

SAMPLE LAYOUT 2

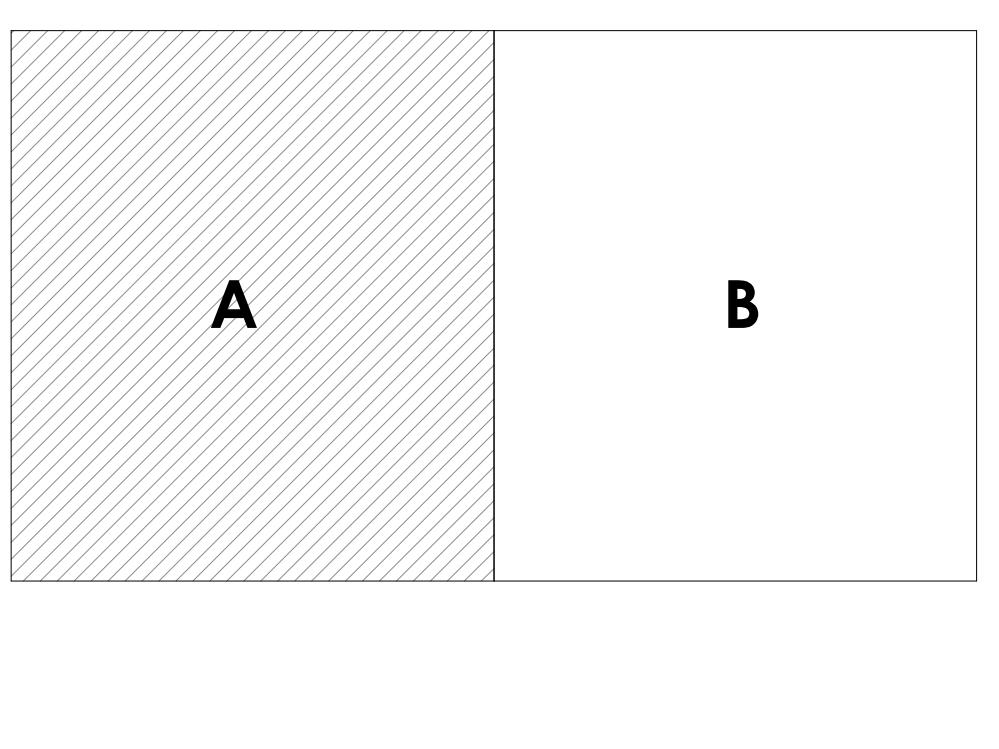


NOTE: AS INDICATED IN ROOM NUMBER 102, SOME ROOMS SHALL HAVE MULTIPLE FLOOR AND WALL FINISHES. SEE GENERAL NOTE "C" ON SHEET A603A FOR FLOOR COVERING TRANSITIONS. THE WALL FINISH INDICATED AS "W2" IN THE ROOM WITHOUT AN ARROW POINTING TO ANY SPECIFIC WALL) SHALL APPLY TO THE WEST, NORTH AND EAST WALL. WHERE WALL FINISHES ARE INDICATED WITH AN ARROW POINTING TO THE SOUTH SIDE, WALL SHALL HAVE MULTIPLE FINISHES SUCH AS "W3" AND "W4". SEE INTERIOR ELEVATIONS FOR TRANSITION DETAILS BETWEEN "W3" AND "W4".

GENERAL NOTES

- A. SEE SHEET G003 AND G005 FOR SYMBOLS, GENERAL NOTES AND LEGEND.
- B. SEE SHEET A505A FOR CABINET LEGEND.
- C. SEE SHEET A601A FOR DOOR SCHEDULE.
- D. SEE SHEET A602A FOR WINDOW SCHEDULE.
- E. SEE SHEET A603A FOR FINISH SCHEDULE AND GENERAL NOTES

KEY PLAN



Riverton Hospital

Gl - ASC

Riverton, UT 84065

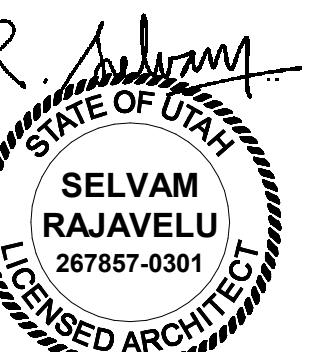
NJRA Project # 25232.00
Construction Documents Nov. 17, 2025

Finish Plan

Level 2 - Area

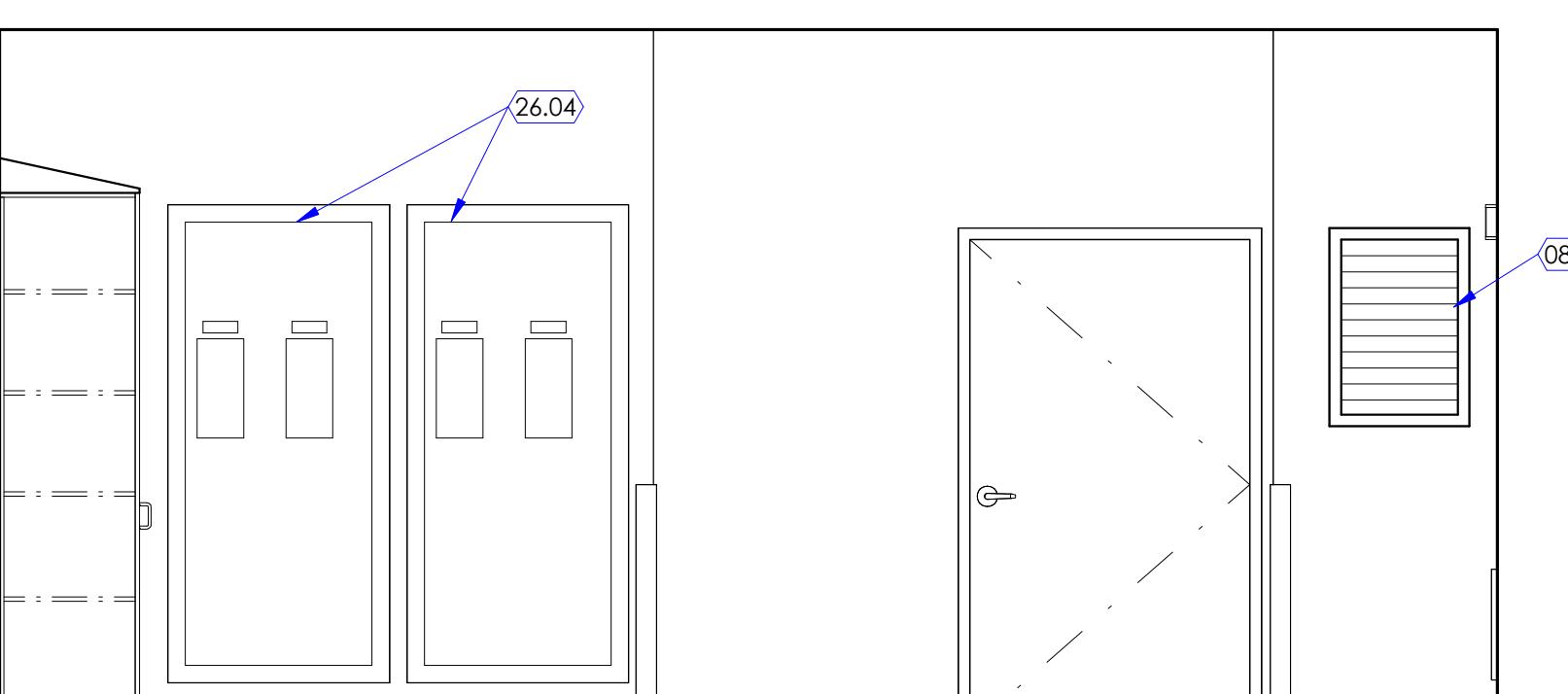
A

A127A

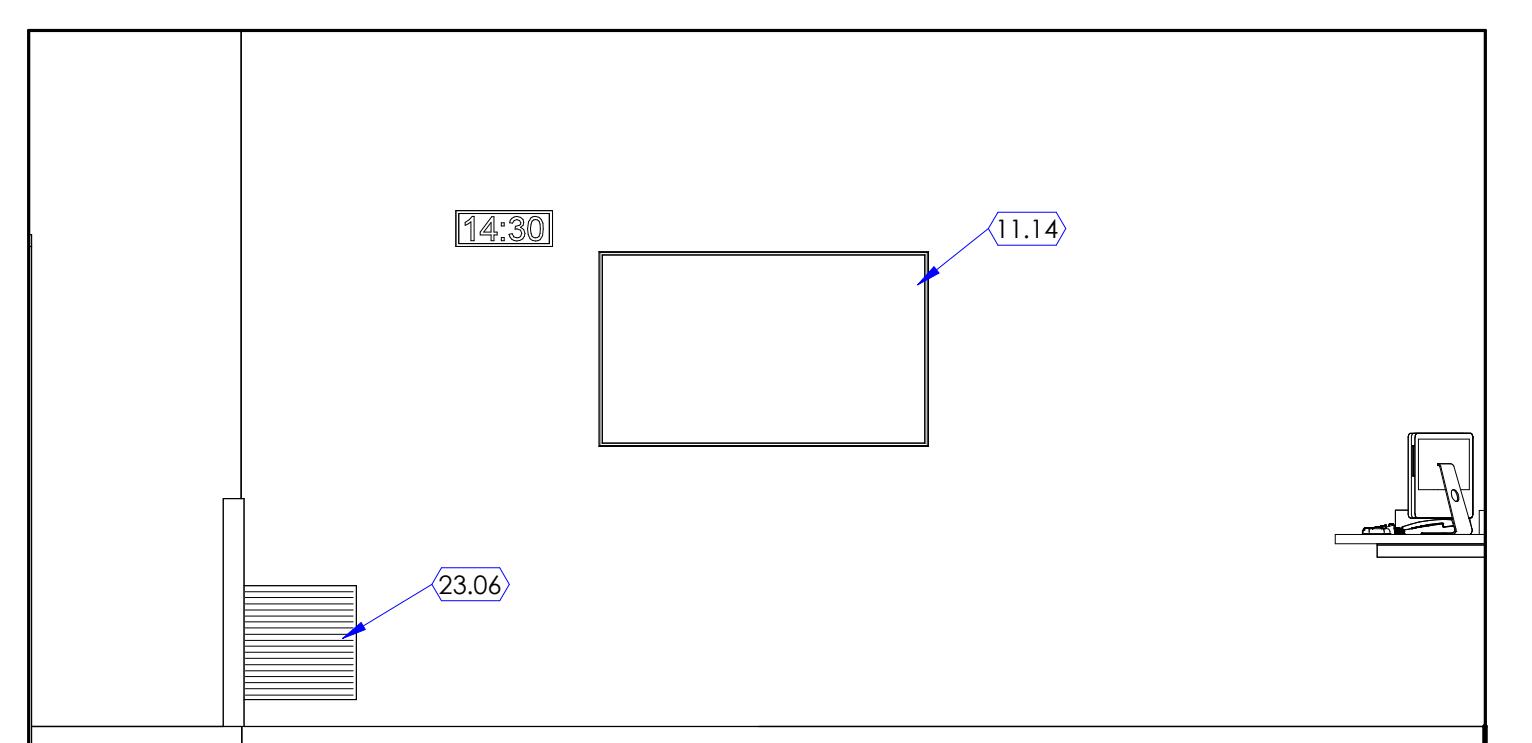


KEYED NOTES

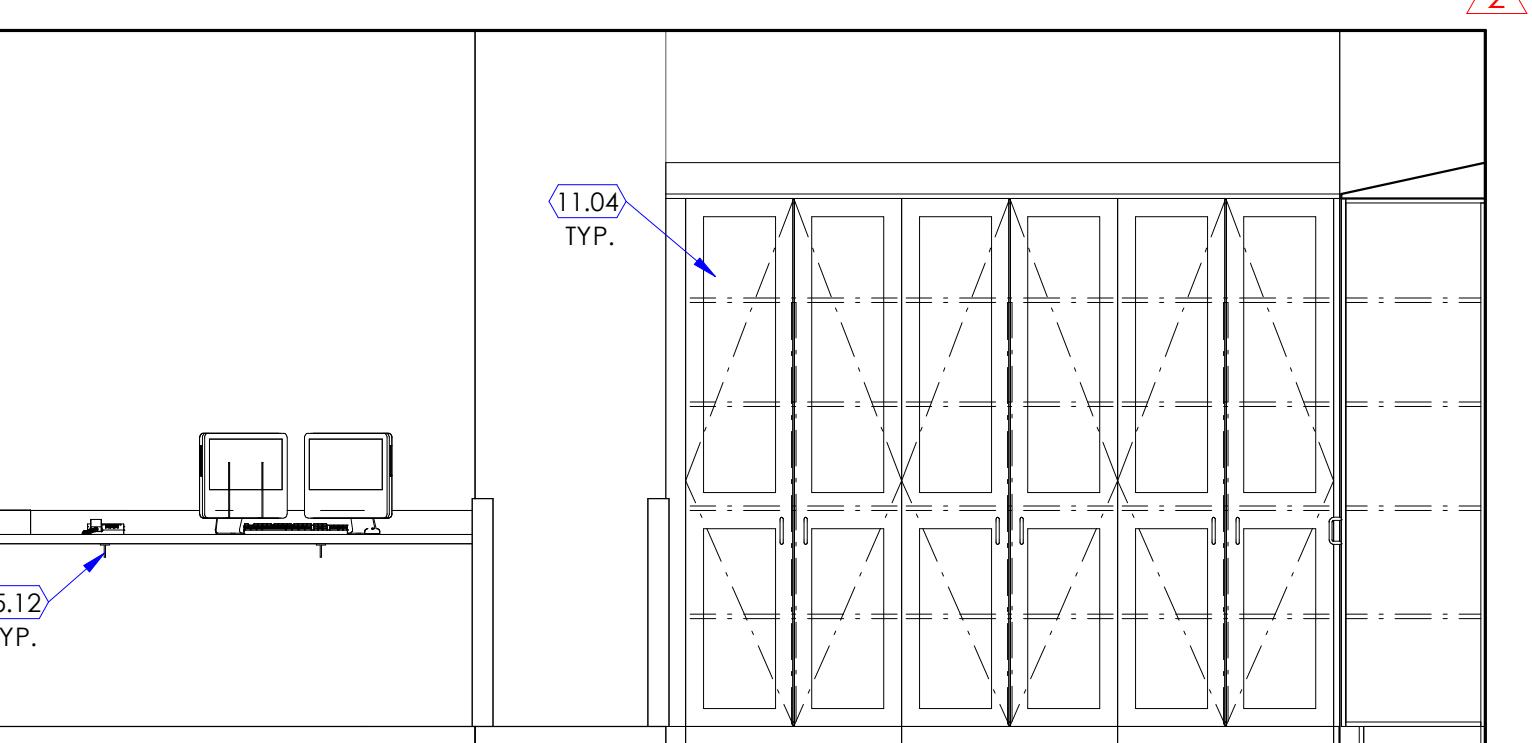
05.12 STEEL ANGLE SUPPORTS FOR COUNTERTOP WHERE KNEE SPACE OCCURS BELOW. LOCATE COUNTER SUPPORTS AT 4'-0" O.C. MAX. SEE DETAILS 4/A505B AND 5/A505B.
08.03 INSULATED GLAZING UNIT WITH INTEGRAL LOUVERS. BASIS OF DESIGN: VISION CONTROL BY UNICELL ARCHITECTURAL. ENTIRE ASSEMBLY TO BE DESIGNED BY MANUFACTURER. PROVIDE ALUMINUM KNOB FOR OPERATING LOUVERS. COLOR: DURACOLOR GOLD.
08.12 OR WINDOW WITH INTEGRAL GLAZING UNIT AND HOLLOW METAL FRAME. EACH LEAD LINED AS REQUIRED TO MATCH ADJACENT WALL LINING. SEE PHYSICISTS REPORT. SEE 4/A601A.
11.04 INNERSPACE CABINETS. OWNER FURNISHED. VENDOR INSTALLED.
11.14 TELEVISION (TV). NOT IN CONTRACT. OWNER FURNISHED. OWNER INSTALLED. PROVIDE WALL MOUNT METAL BRACKET TO SUPPORT THE TV. BRACKET SIZE AND SPACING SHALL BE BASED ON MANUFACTURER'S PROVIDED PLWOOD BACKING IN WALL AS REQUIRED TO SUPPORT THE TV BRACKET. PROVIDE POWER, DATA AND HDMI PORT. SEE ELECTRICAL DRAWINGS.
23.06 WALL-MOUNTED DIFFUSER. SEE MECHANICAL DRAWINGS.
26.04 ELECTRICAL ISOLATION PANEL. SEE ELECTRICAL DRAWINGS.



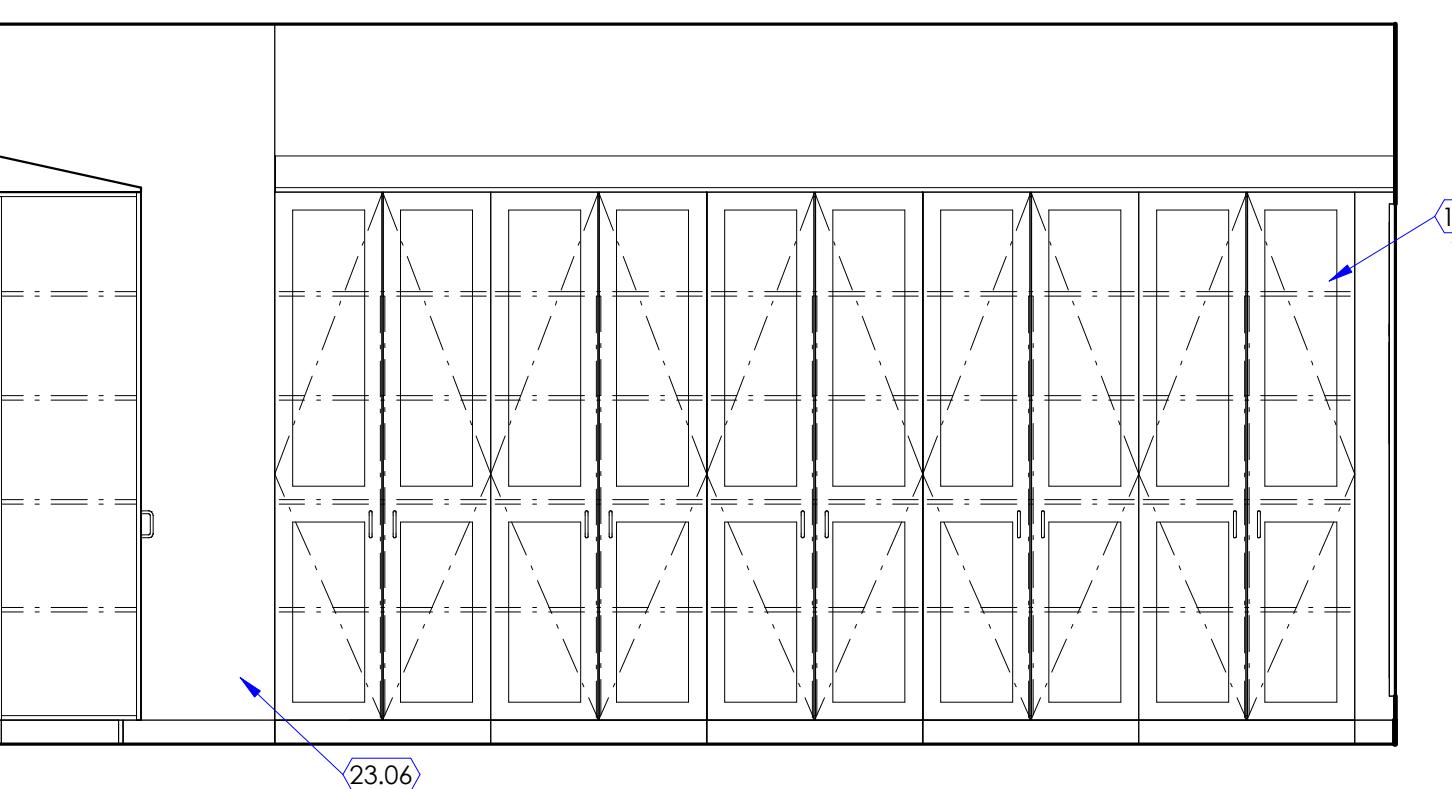
1 OR #1
SCALE: 3/8" = 1'-0"



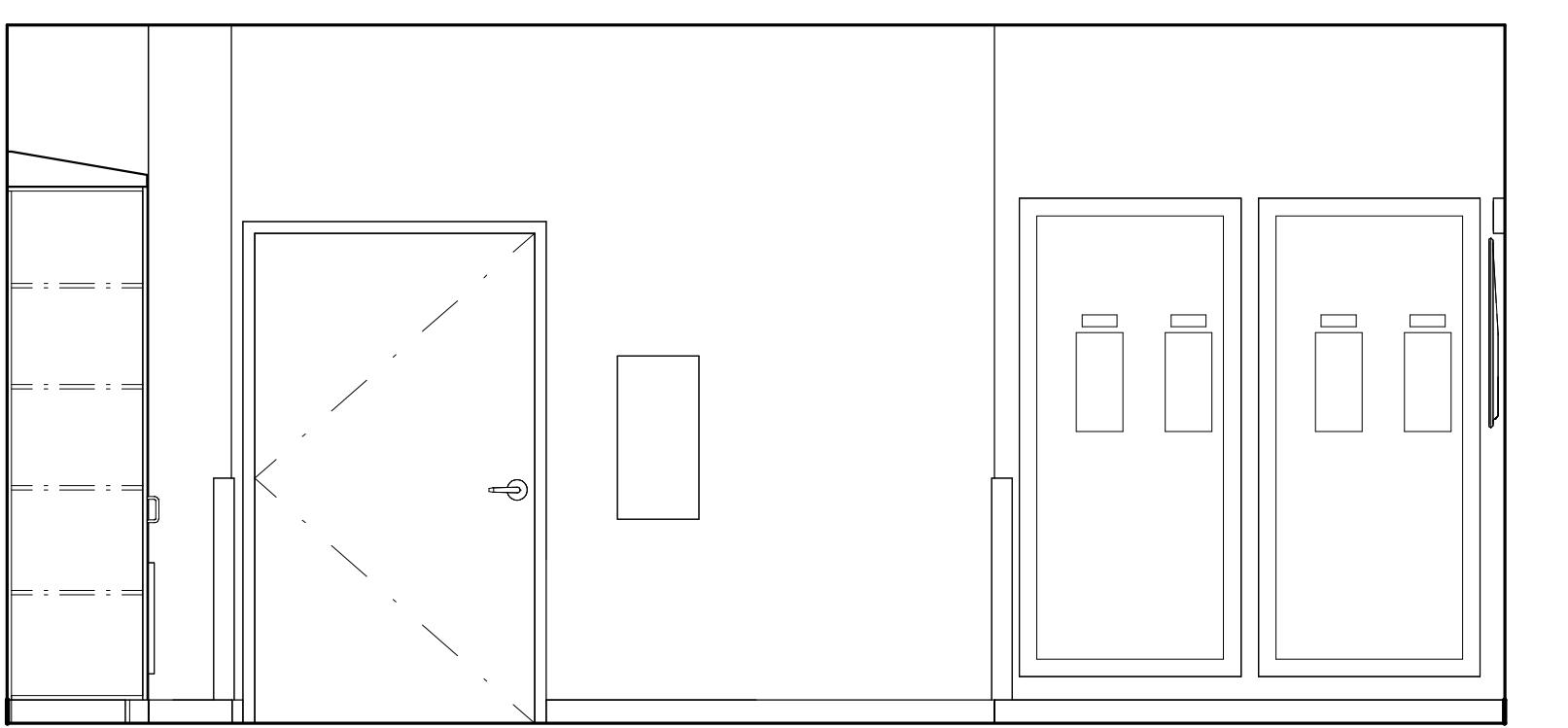
2 OR #1
SCALE: 3/8" = 1'-0"



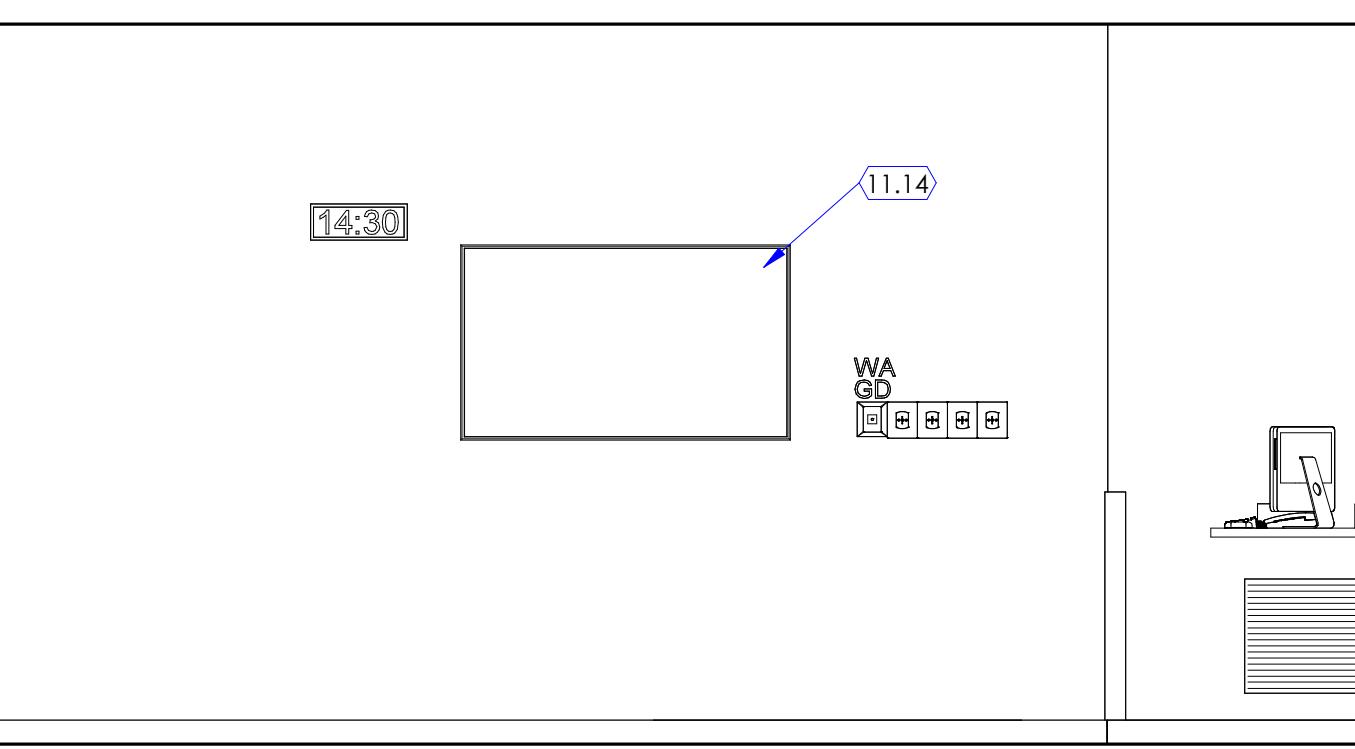
3 OR #1
SCALE: 3/8" = 1'-0"



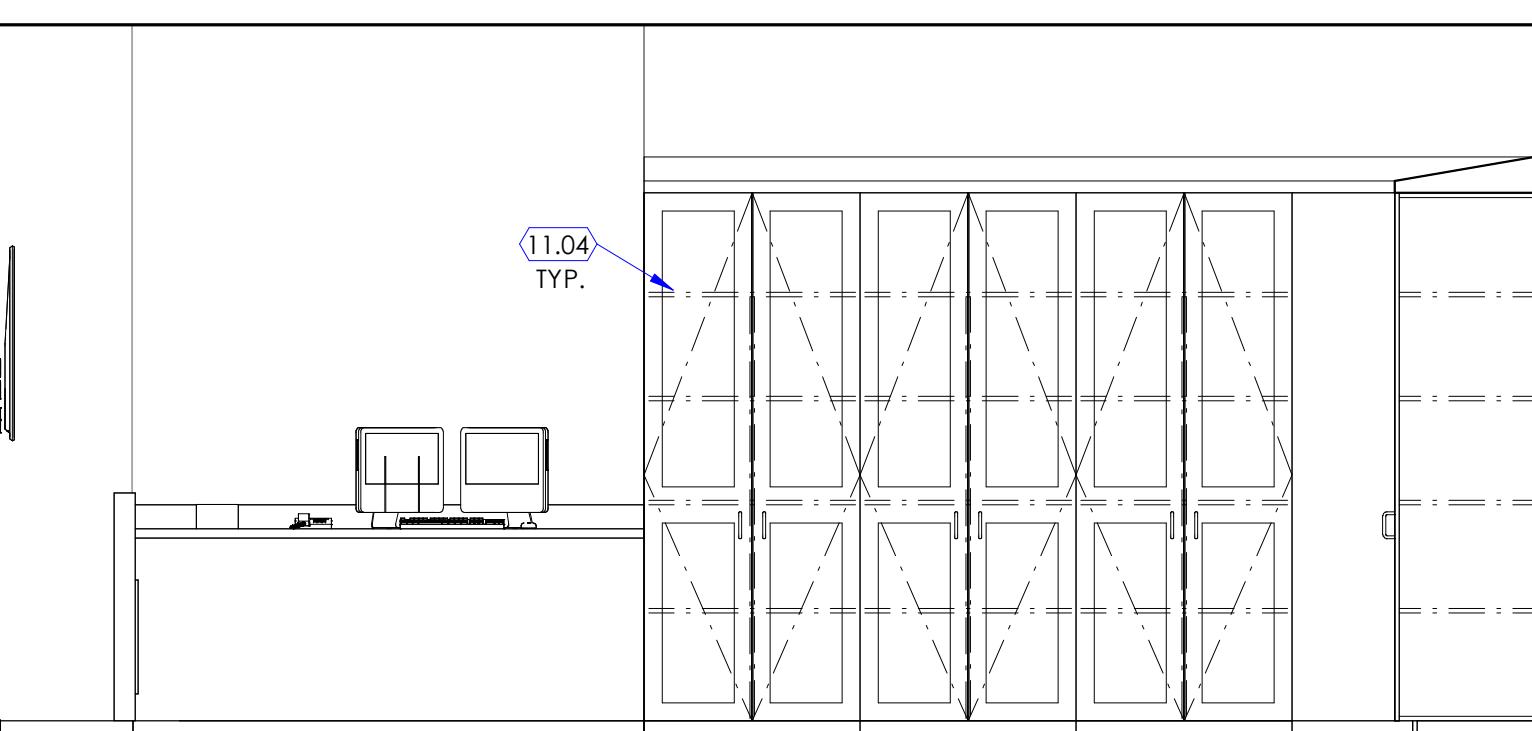
4 OR #1
SCALE: 3/8" = 1'-0"



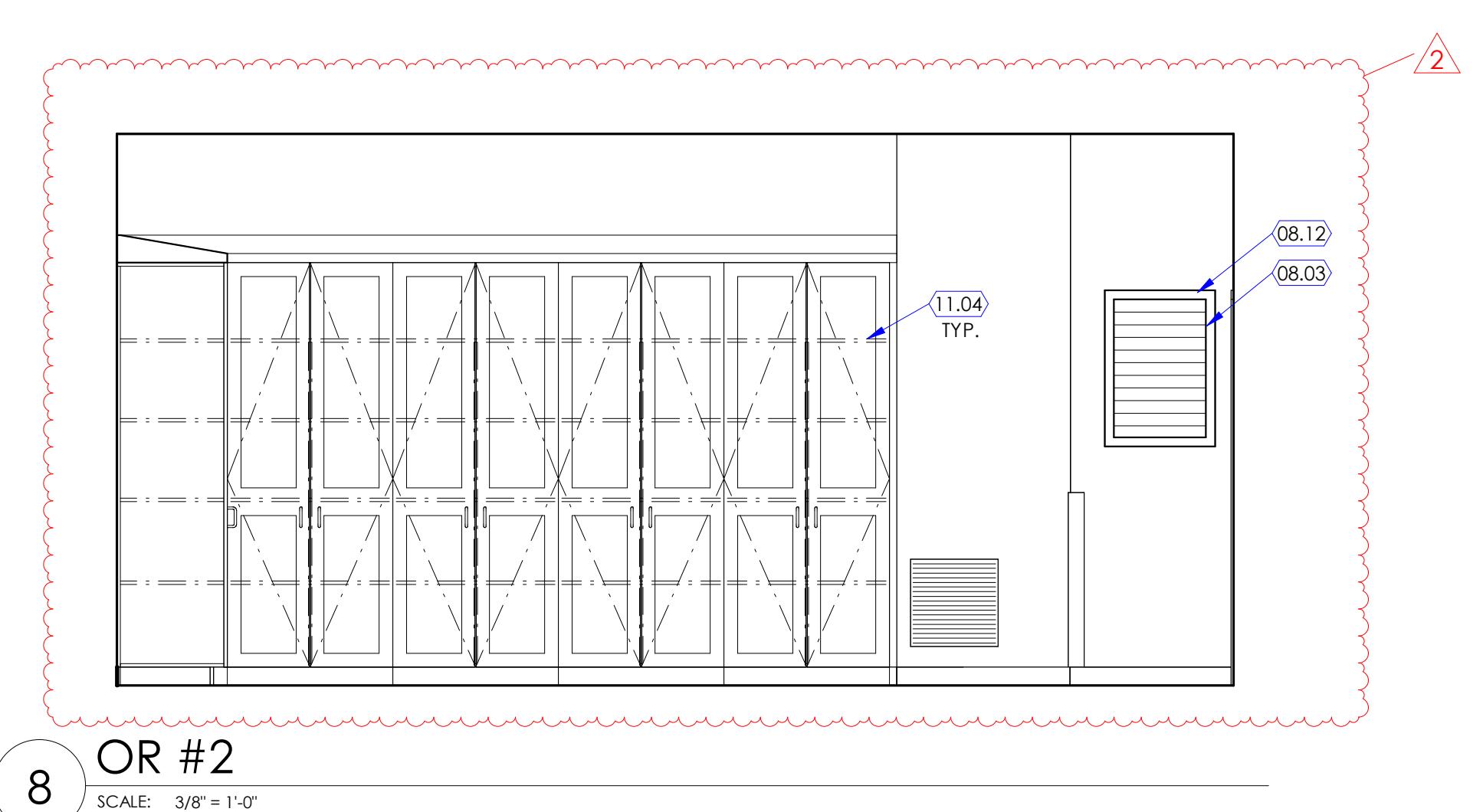
5 OR #2
SCALE: 3/8" = 1'-0"



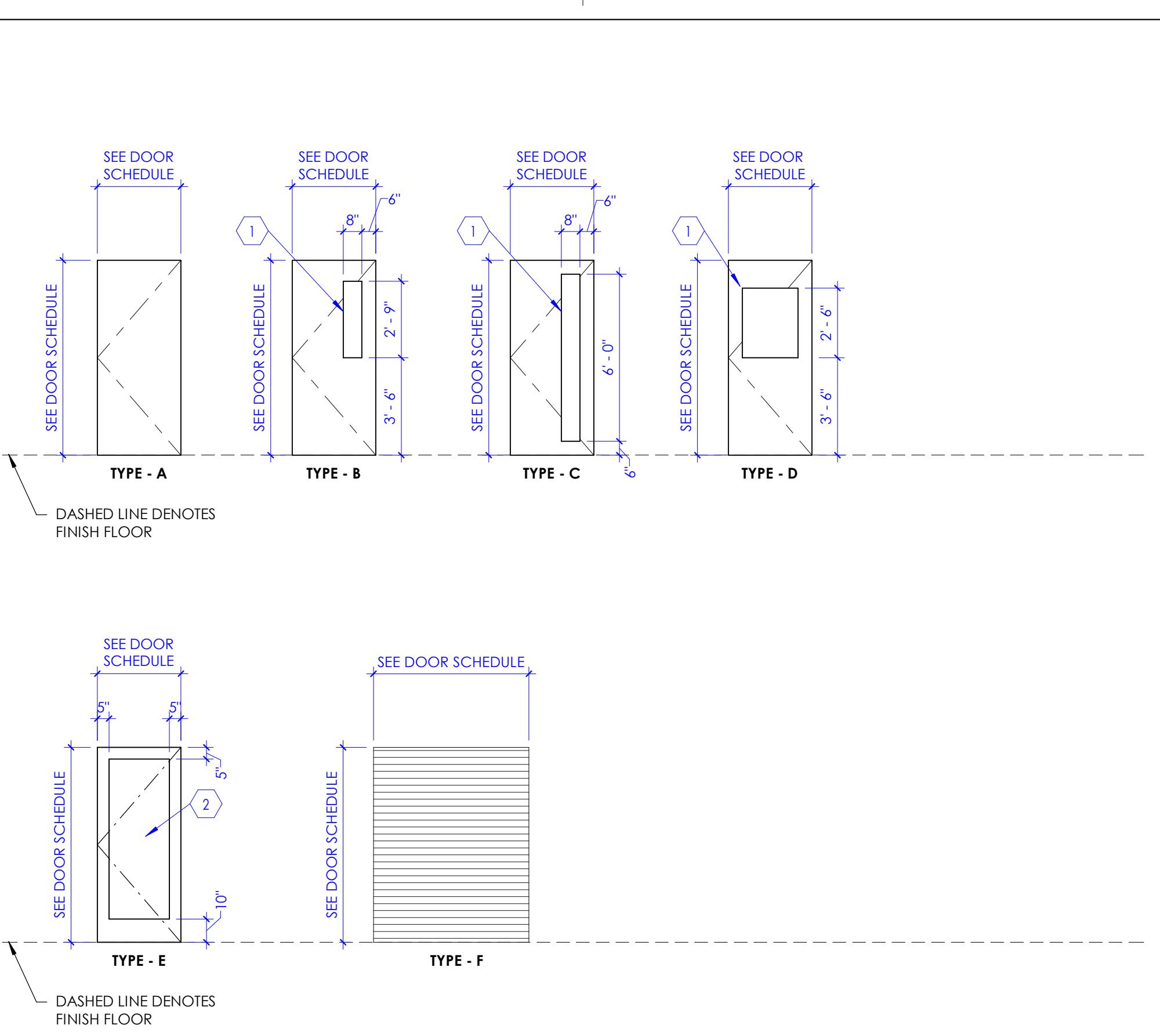
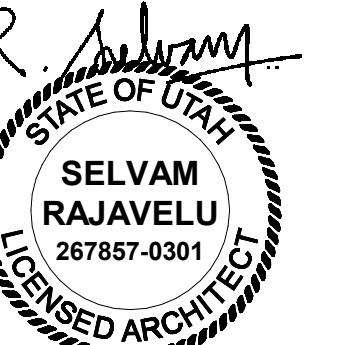
6 OR #2
SCALE: 3/8" = 1'-0"



7 OR #2
SCALE: 3/8" = 1'-0"



8 OR #2
SCALE: 3/8" = 1'-0"



KEYED NOTES

- VISION PANEL GLAZING IN VISION PANEL SHALL BE 1/4" THICK, CLEAR, TEMPERED, GLAZING, FOR WOOD DOOR, PROVIDE WOOD TRIM FRAME FLUSH WITH THE FACE OF THE DOOR, AROUND THE VISION PANEL. OTHER DOOR TYPES SPECIES OF WOOD TRIM SHALL MATCH WOOD DOOR, FOR HOLLOW METAL DOOR, PROVIDE METAL TRIM AROUND VISION PANEL, GLAZING SHALL BE FIRE RATED IF DOORS ARE REQUIRED TO BE FIRE RATED.
- FOR EXTERIOR DOORS OF THIS TYPE, GLAZING SHALL BE TINTED, CLEAR, TEMPERED, LOW E, AND 1/4" THICK, FOR EXTERIOR DOORS OF THIS TYPE, GLAZING SHALL BE CLEAR, TEMPERED, AND 1/4" THICK, STAINLESS STEEL WELDED WIRE MESH (15 GAUGE) ATTACHED TO DOOR, PROVIDE FRAME AROUND THE OPENING IN DOOR TO SECURE THE MESH IN PLACE.
- METAL LOUVER IN DOOR FOR VENTILATION.

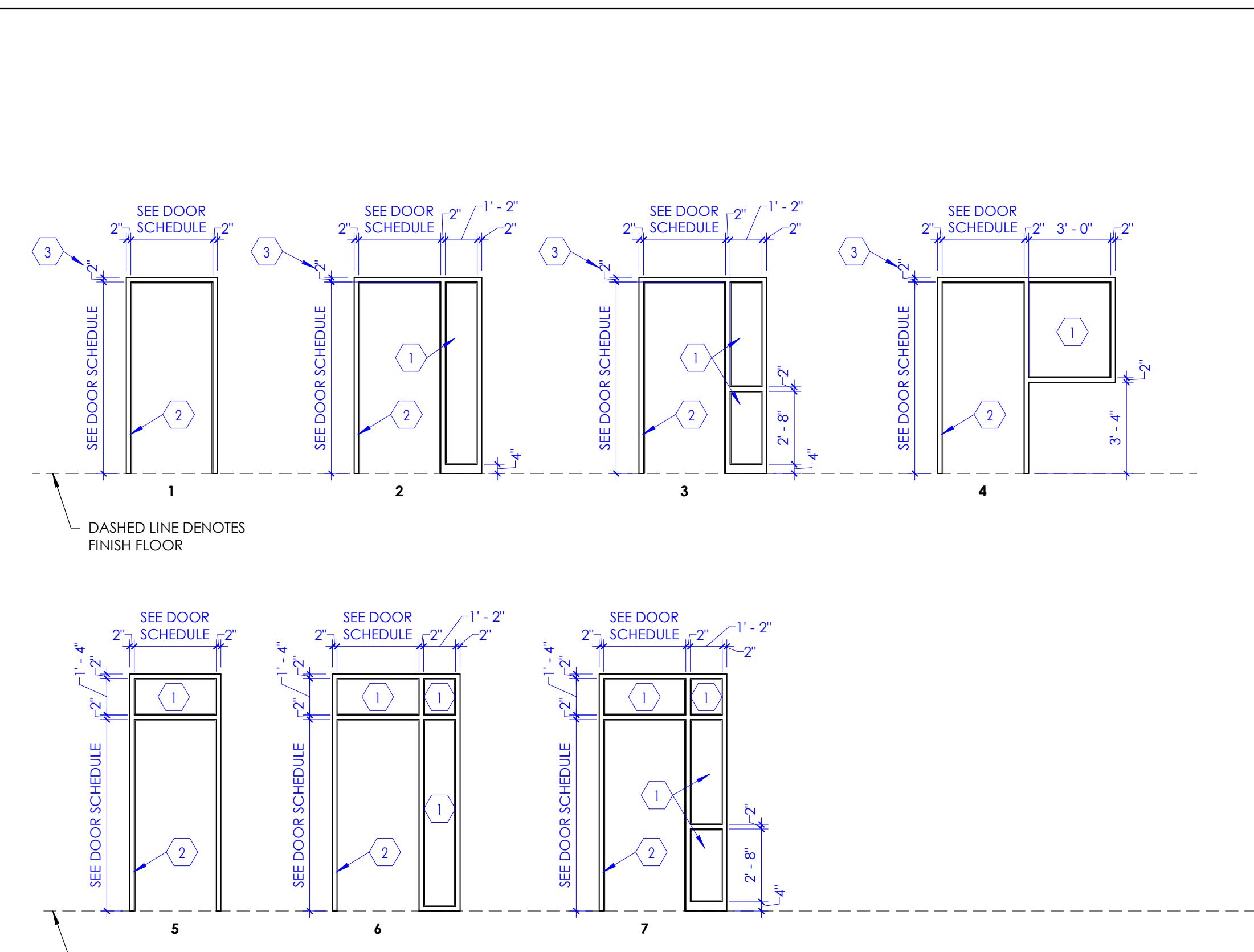
DOOR SCHEDULE

DOOR #	# OF PANELS	DOOR			SIZE		TYPE (2/A601A)	FRAME		DETAILS		DOOR #	FIRE RATING (MINUTES)	HARDWARE GROUP	COMMENTS
		W1	W2	HEIGHT	THICKNESS	MATERIAL		JAMB	HEAD	THRESHOLD					
A201A	1	3' - 0"		7' - 0"	1 3/4"	WD	A	1	5 7/8"	HM		A201A	1,1	2	
A202A	1	3' - 0"		7' - 0"	1 3/4"	WD	A	1	5 7/8"	HM		A202A	1	1	
A204A	1	3' - 0"		7' - 0"	1 3/4"	WD	A	1	5 7/8"	HM		A204A	3		
B121B	1	3' - 0"		7' - 0"	1 3/4"	WD	A	1	5 7/8"	HM		B121B	3		
B201A	1	3' - 0"		7' - 0"	1 3/4"	WD	A	1	5 7/8"	HM		B201A	3		
B202A	1	3' - 0"		7' - 0"	1 3/4"	WD	A	1	5 7/8"	HM		B202A	45	3	
B202B	1	3' - 0"		7' - 0"	1 3/4"	WD	A	1	5 7/8"	HM		B202B	45	3	
B202C	1	3' - 0"		7' - 0"	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.		B202C	7	1	
B205A	1	4' - 0"		7' - 0"	1 3/4"	WD	A	1	5 7/8"	HM		B205A	4		
B206A	1	4' - 0"		7' - 0"	1 3/4"	WD	A	1	5 7/8"	HM		B206A	4,1	2	
B209A	1	4' - 0"		7' - 0"	1 3/4"	WD	A	1	8 1/4"	HM		B209A	2		
B210A	1	3' - 0"		7' - 0"	1 3/4"	WD	A	1	8 1/4"	HM		B210A	5		
B211A	1	3' - 0"		7' - 0"	1 3/4"	WD	A	1	5 7/8"	HM		B211A	5		
B212A	1	3' 4 1/2"		7' - 0"	1 3/4"	WD	A	1	5 7/8"	HM		B212A	6		
B213A	1	4' - 0"		7' - 0"	1 3/4"	WD	A	1	5 7/8"	HM		B213A	45	8	

COMMENTS

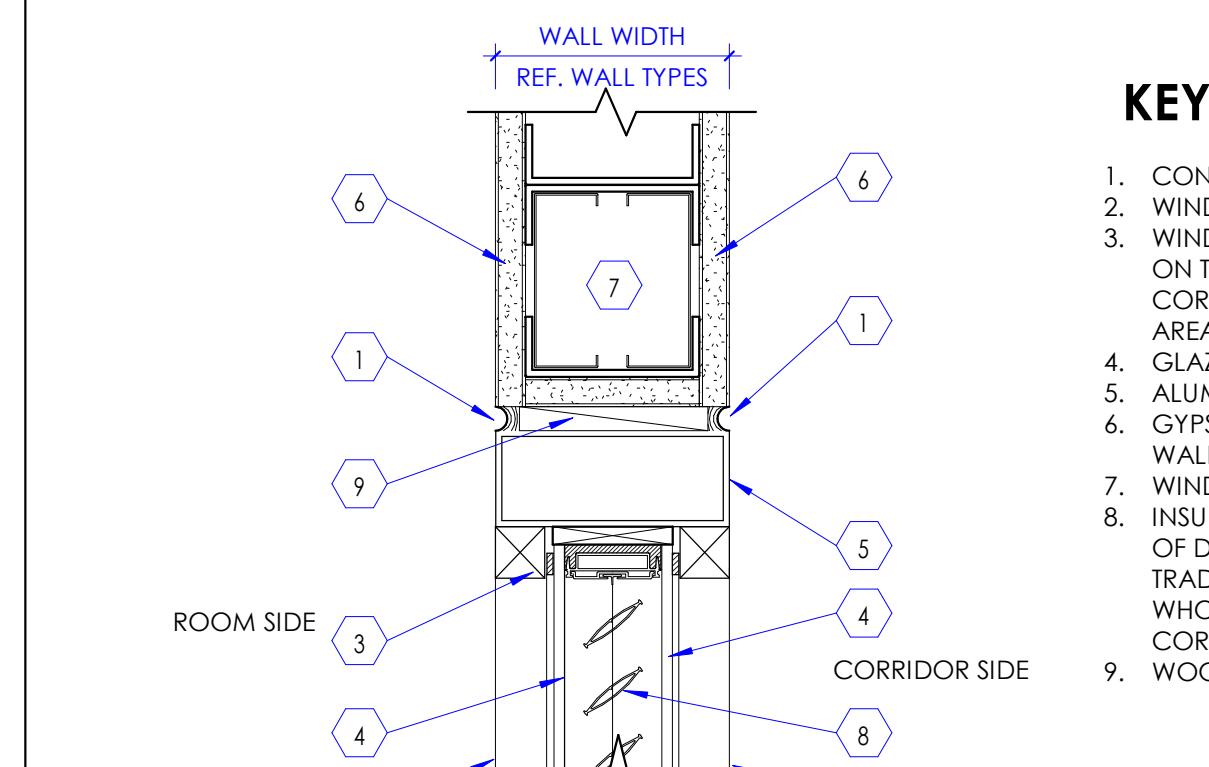
1. PROVIDE CARD READER.
2. PROVIDE LEAD LINED DOOR WITH LINING EQUIVALENT TO ADJACENT LEAD LINED WALLS.

1 Door Types
NOTE: REFER TO 'DOOR SCHEDULE' TABLE FOR DOOR TYPES REQUIRED FOR THIS PROJECT. SOME DOOR TYPE ELEVATIONS INDICATED ABOVE, MAY NOT BE APPLICABLE TO THIS PROJECT.
SCALE: 1/4" = 1'-0"



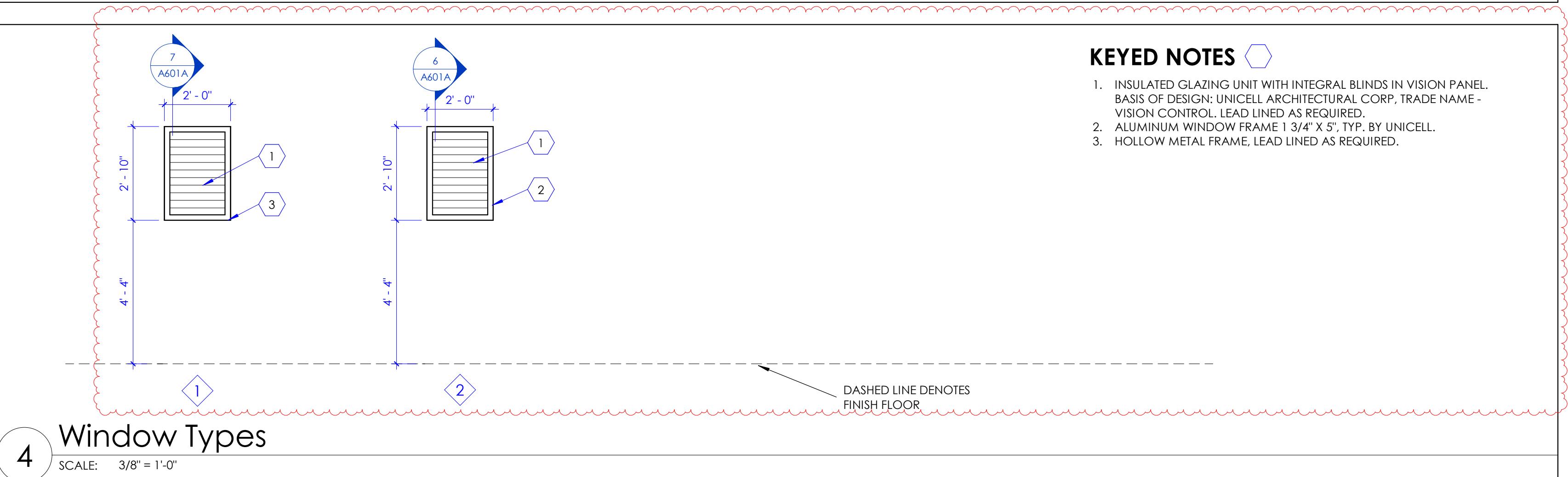
KEYED NOTES

1. GLAZING SHALL BE CLEAR, TEMPERED, AND 1/4" THICK.
2. DOOR FRAME, SEE DOOR SCHEDULE.
3. WHERE DOOR OCCURS AT MASONRY WALL (8" HIGH, C.M.U. BLOCKS), AND WITH A TYPICAL DOOR HEIGHT OF 7'-0", USE 4' FRAME AS FRAME HEAD INSTEAD OF THE STANDARD 2' FRAME.



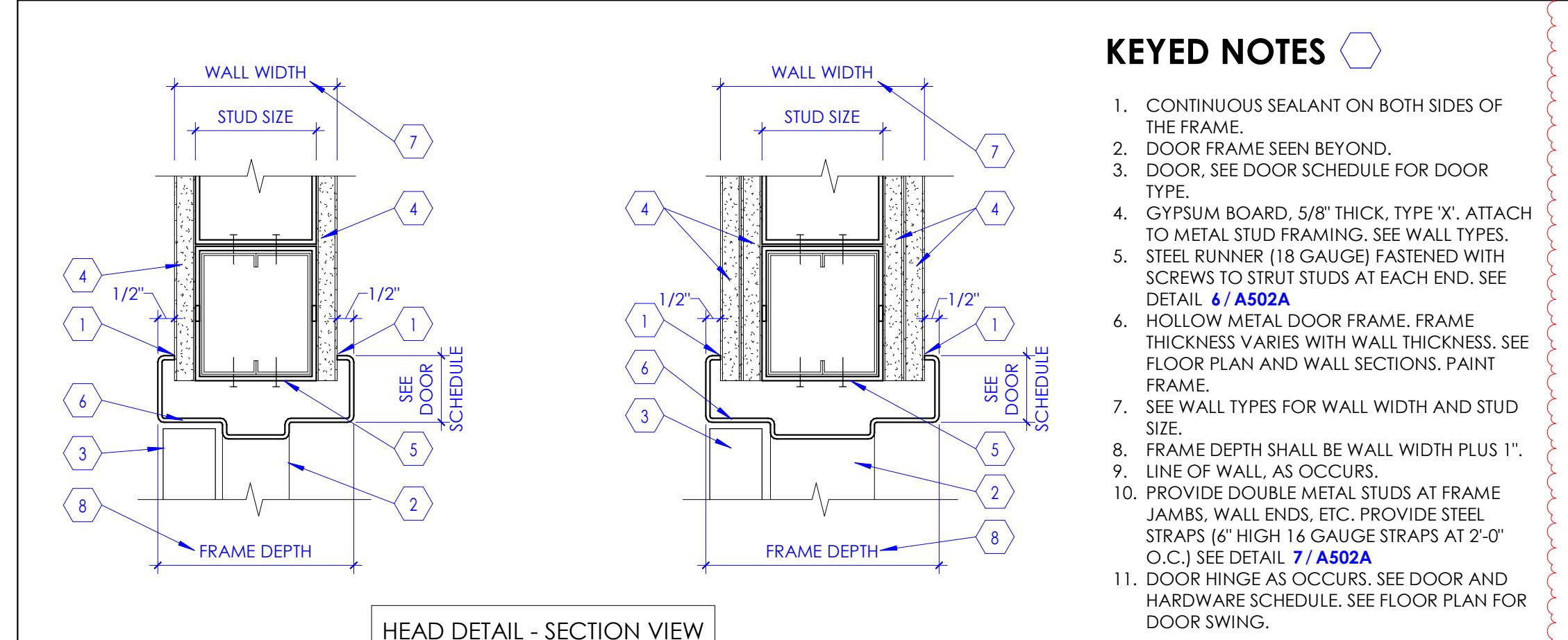
6 Window Frame - Head Detail
SCALE: 3" = 1'-0"

2 Frame Types
NOTE: REFER TO 'DOOR SCHEDULE' FOR FRAME TYPES REQUIRED FOR THIS PROJECT. SOME FRAME TYPE ELEVATIONS INDICATED ABOVE, MAY NOT BE APPLICABLE TO THIS PROJECT.
SCALE: 1/4" = 1'-0"

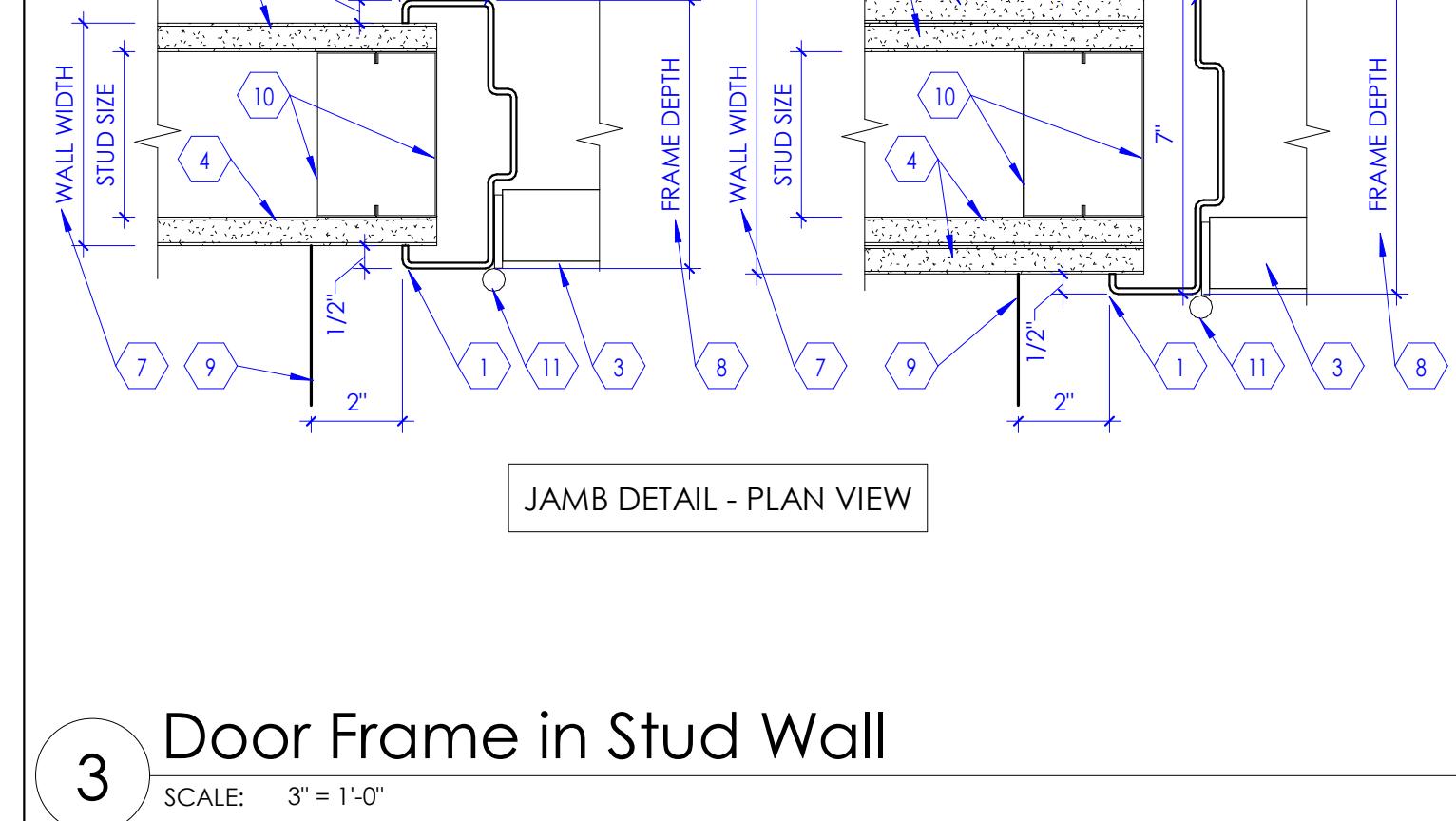


KEYED NOTES

1. GLAZING SHALL BE CLEAR, TEMPERED, AND 1/4" THICK, INTEGRAL LUMPS IN VISION PANEL, BASIS OF DESIGN: UNICELL ARCHITECTURAL CORP, TRADE NAME - VISION CONTROL, LEAD LINED AS REQUIRED.
2. ALUMINUM WINDOW FRAME 1 3/4" X 5", TYP. BY UNICELL.
3. HOLLOW METAL FRAME, LEAD LINED AS REQUIRED.



7 Window Frame - Head Detail
SCALE: 3" = 1'-0"



3 Door Frame in Stud Wall
SCALE: 3" = 1'-0"

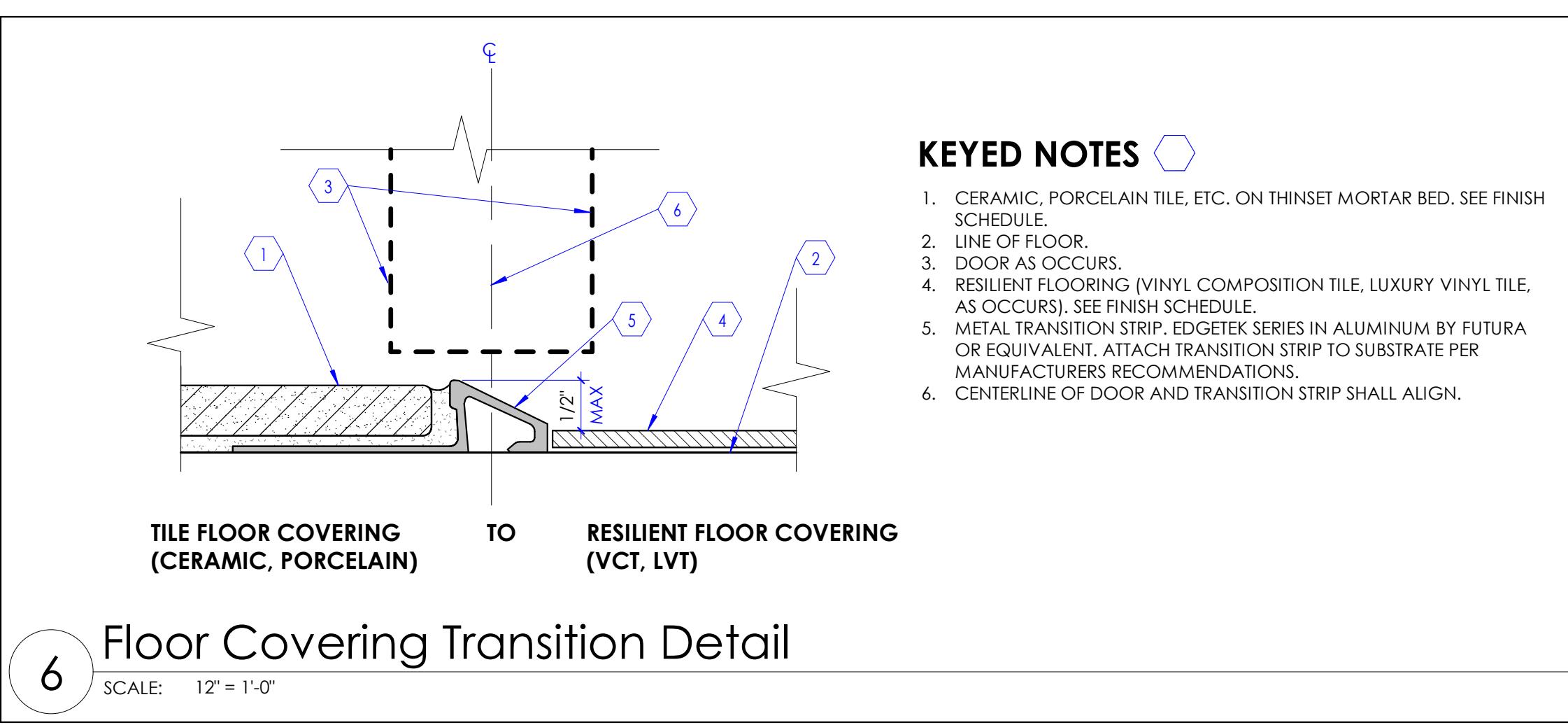
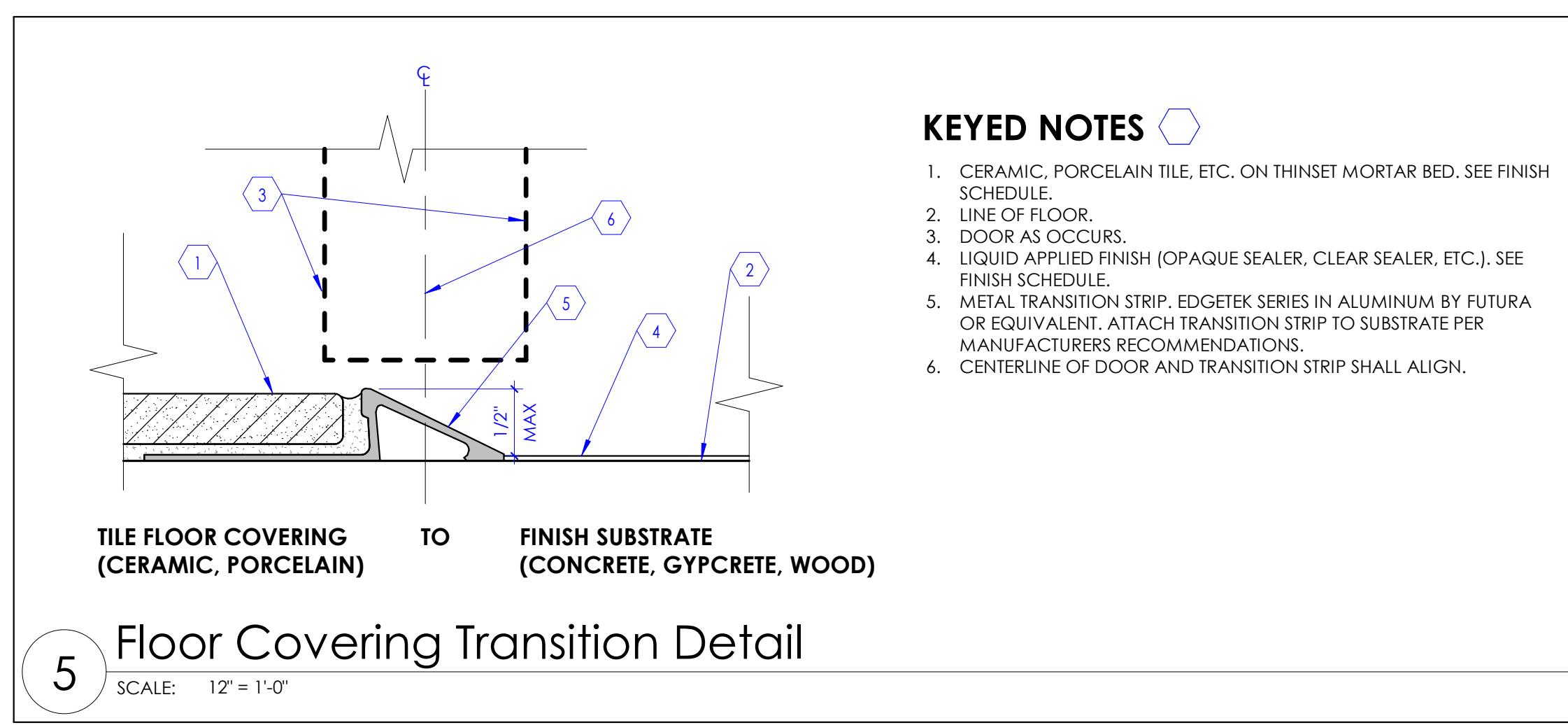
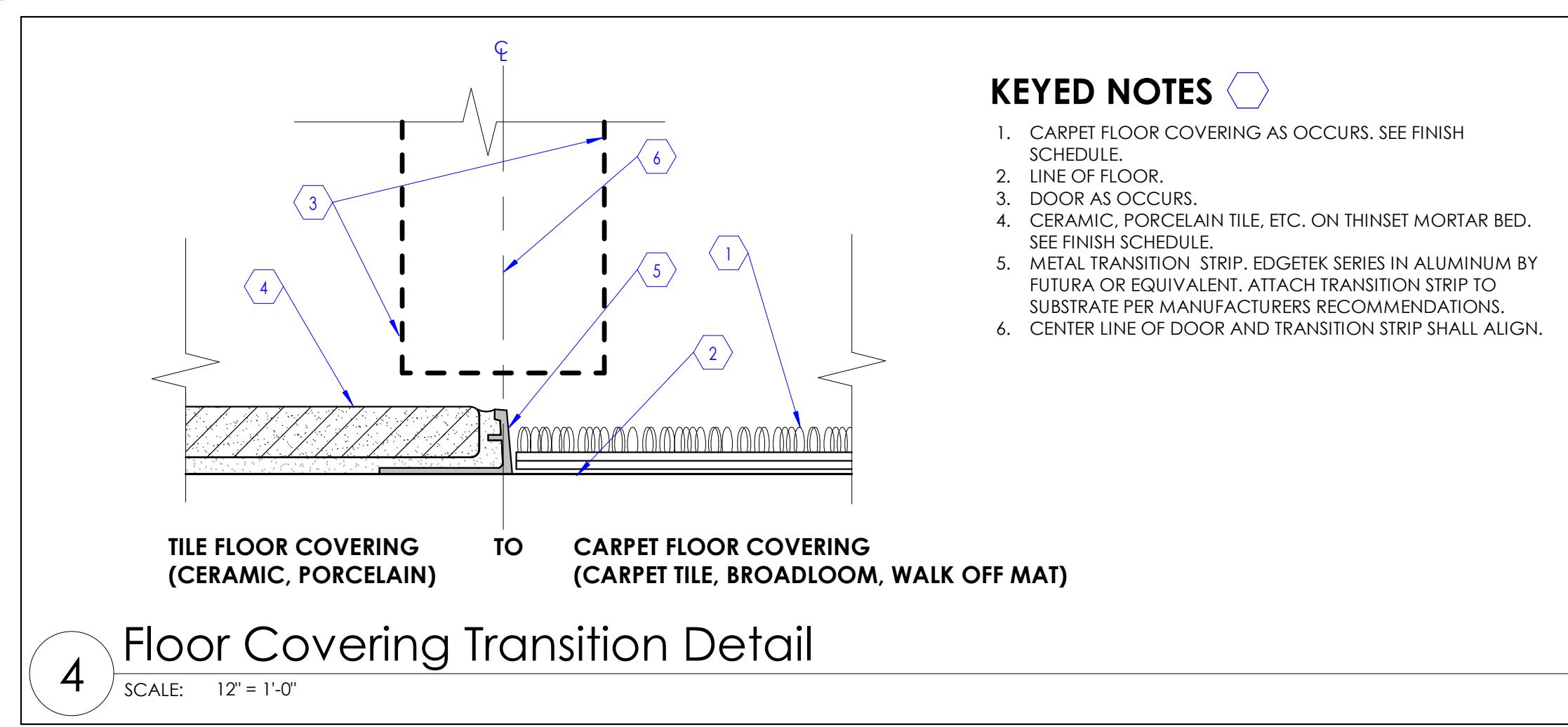
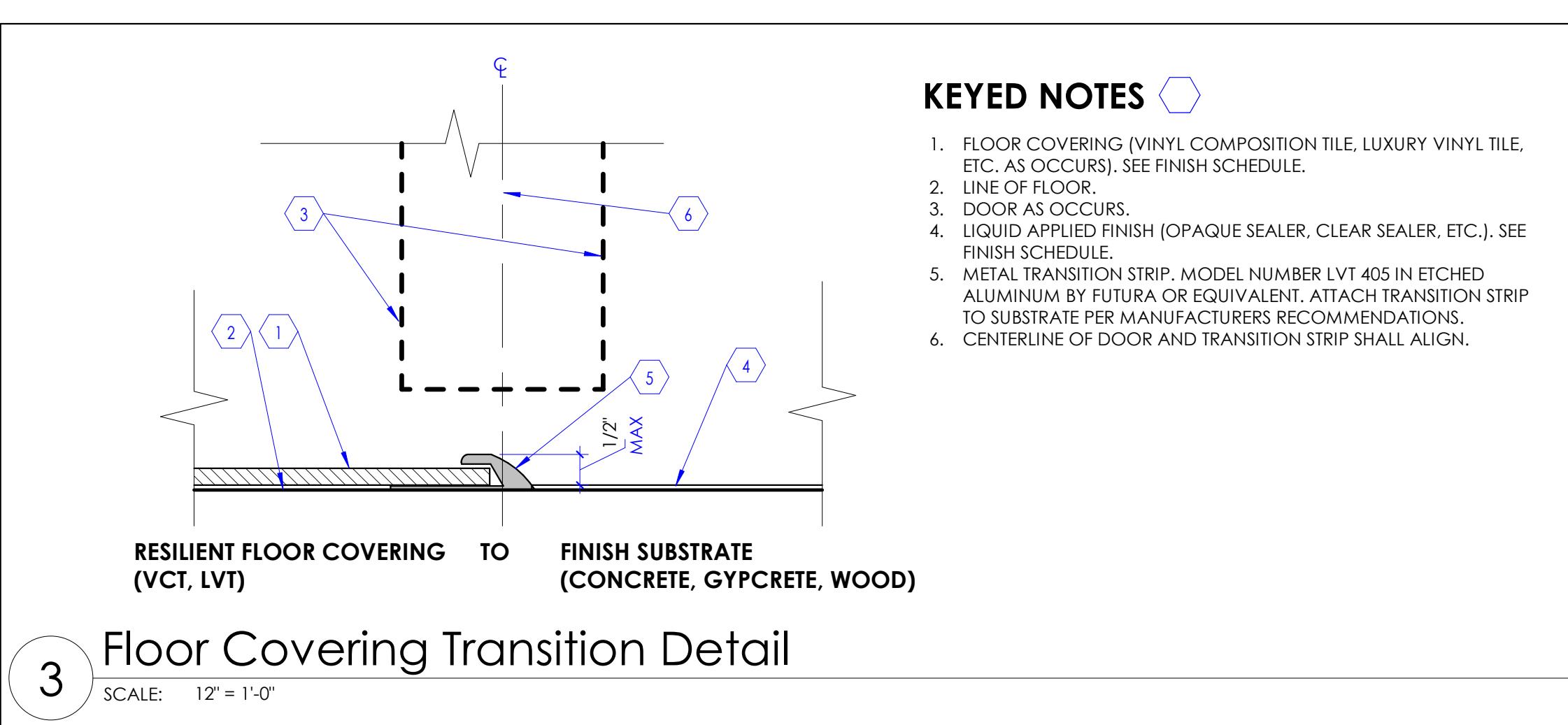
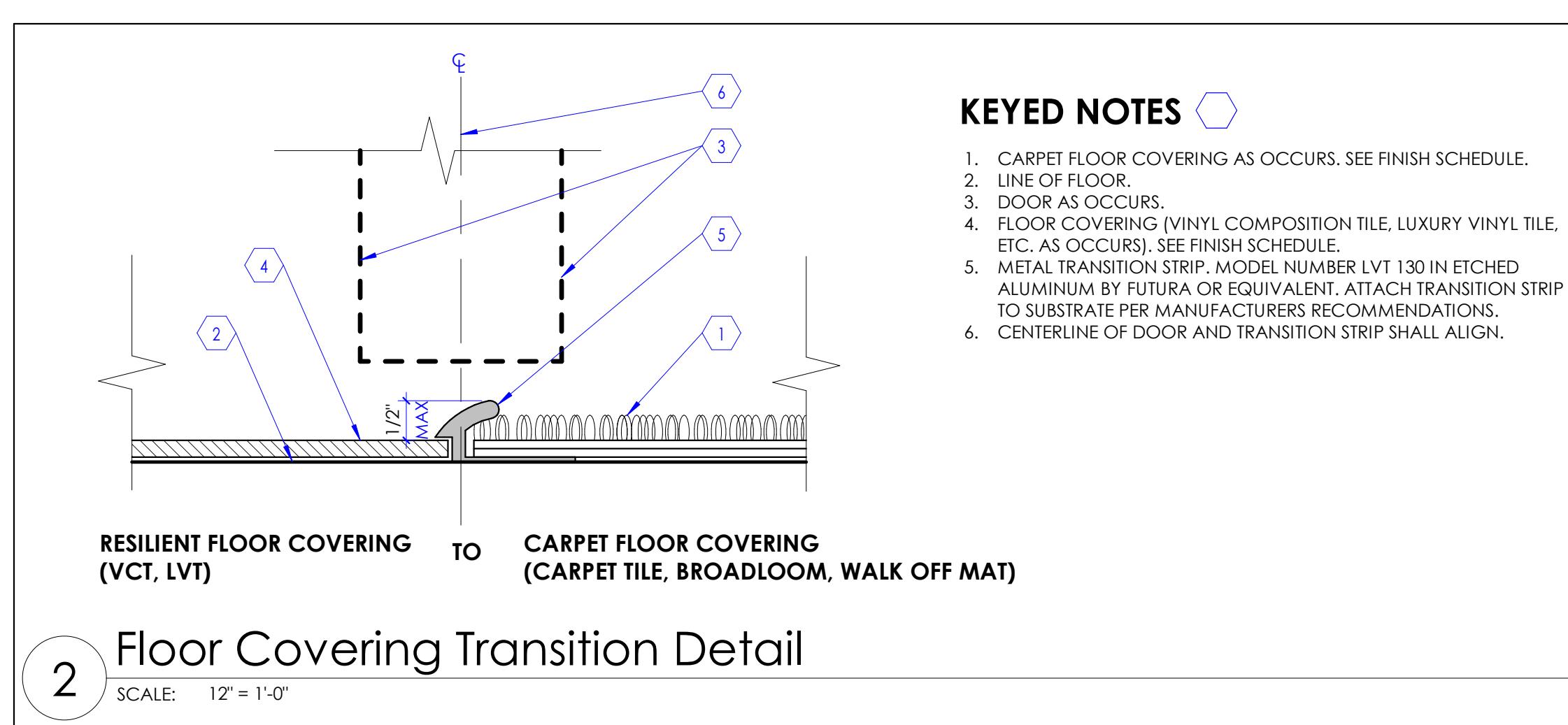
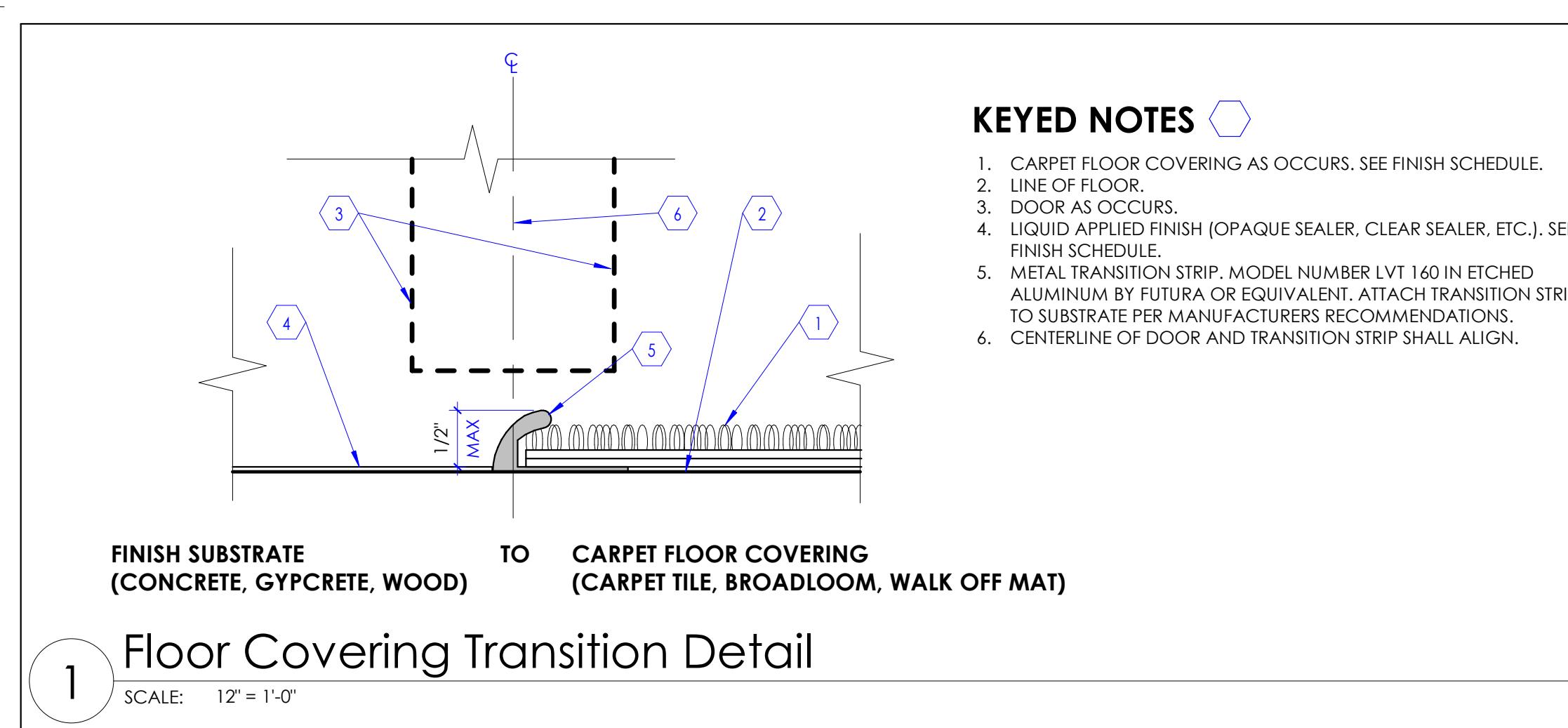
FINISH SCHEDULE								
TAG	FINISH TYPE	SIZE	MATERIAL DESCRIPTION	MANUFACTURER	STYLE	MODEL #	COLOR	COMMENTS
F1	FLOOR FINISH		sheet vinyl	TARKETT	IQ OPTIMA	807	DARK SAND	-
F2	FLOOR FINISH		LUXURY VINYL TILE - MATCH EXISTING	MANNINGTON COMMERCIAL	-	-	-	1
F4	FLOOR FINISH	18" X 36"	CARPET TILE	SHAW CONTRACT	STIPPLE TILE	5T116	SLATE 13585	2
F5	FLOOR FINISH		sheet vinyl - MATCH EXISTING	MANNINGTON COMMERCIAL	BIOSPEC MD	-	-	1
B1	WALL BASE	4" HIGH	COVED SHEET VINYL	TARKETT	IQ OPTIMA	807	DARK SAND	-
B2	WALL BASE		COVED SHEET VINYL - MATCH EXISTING	MANNINGTON COMMERCIAL	BIOSPEC MD	-	-	1
B3	WALL BASE	4" HIGH	RUBBER BASE	ROPPE	PINNACLE	-	178 PEWTER	-
B5	WALL BASE		RUBBER BASE - MATCH EXISTING	ROPPE	PINNACLE	-	-	1
B6	WALL BASE	6" HIGH	COVED SHEET VINYL	TARKETT	IQ OPTIMA	807	DARK SAND	-
W1	WALL FINISH		PAINT	SHERWIN WILLIAMS	EGGSHELL FINISH	SW 7005	PURE WHITE	-
W2	WALL FINISH		PAINT - MATCH EXISTING	SHERWIN WILLIAMS	EGGSHELL FINISH	-	-	1
W3	WALL FINISH		PAINT - EPOXY	SHERWIN WILLIAMS	-	SW 7005	PURE WHITE	-
C1	CEILING FINISH		PAINTED GYPSUM CEILING	SHERWIN WILLIAMS	FLAT FINISH	SW 7005	PURE WHITE	5
C2	CEILING FINISH	24" X 48"	ACOUSTICAL CEILING TILES AND GRID - MATCH EXISTING	ARMSTRONG CEILING SOLUTIONS	ULTIMA HEALTH ZONE	1938	-	1, 5
MS1	MISC. SURFACE FINISH		PAINTED HOLLOW METAL DOOR FRAMES - MATCH EXISTING	SHERWIN WILLIAMS	SEMI-GLOSS FINISH	-	-	1
PL1	PLASTIC LAMINATE FINISH		PLASTIC LAMINATE SHEET OVER SUBSTRATE	LAMINART	MATTE FINISH	3056	MYSTIC WOOD	-
MM1	MONOLITHIC MATERIAL		SOLID SURFACE	CORIAN	SOLID SURFACE	-	NEUTRAL CONCRETE	-
WP1	WALL PROTECTION	0.040" THICKNESS	WAINSCOT PANEL	INPRO ARCHITECTURAL PRODUCTS	PALLADIUM RIGID SHEET	0103	WHITE SAND	3
WP2	WALL PROTECTION	3" LEGS	CORNER GUARDS	INPRO ARCHITECTURAL PRODUCTS	150 HIGH IMPACT CORNER GUARD	0103	WHITE SAND	4

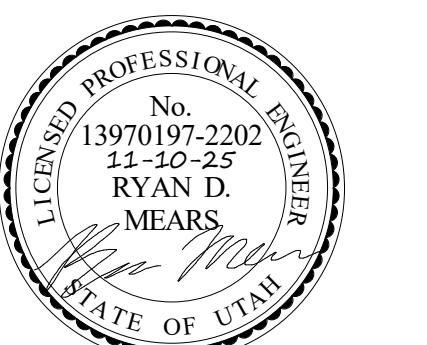
COMMENTS

1. MATCH EXISTING FINISH STYLE AND COLOR. CONTRACTOR TO FIELD VERIFY.
2. CARPET TILE TO BE INSTALLED IN AN ASHLAR PATTERN.
3. WAINSCOT PANEL TO SPAN FROM TOP OF WALL BASE TO 4'-0" A.F.F. AND ALIGN WITH TOP OF CORNER GUARDS WHERE OCCURS. DO NOT USE TRIM WITH WAINSCOT PANEL WALL PROTECTION. SEAL EXPOSED EDGES WITH A THIN BEAD OF CAULK.
4. CORNER GUARDS TO SPAN FROM TOP OF WALL BASE TO 4'-0" A.F.F. AND ALIGN WITH TOP OF WAINSCOT PANEL WHERE OCCURS.
5. ALL CEILING FINISH TAGS ARE LOCATED ON REFLECTED CEILING PLANS.

GENERAL NOTES

- A. BASIS OF DESIGN FOR FINISHES: FINISHES INDICATED ON THE FINISH SCHEDULE ARE BASED ON THE NAMED MANUFACTURER AND THEIR PRODUCTS. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE THE NAMED PRODUCT OR A COMPARABLE PRODUCT BY ONE OF THE APPROVED MANUFACTURERS LISTED IN THE PROJECT MANUAL. SEE RELEVANT SPECIFICATION SECTION.
- B. SEE "SAMPLE LAYOUTS" INDICATED ON THE FINISH SCHEDULE FOR CLARIFICATION ON HOW FINISHES ARE TO BE APPLIED. FINISHES ARE TO BE APPLIED WITH FINISH TAGS FOR FLOOR, WALLS, MISCELLANEOUS SURFACES, ETC. SEE FINISH FLOOR PLANS FOR REQUIRED FINISHES (INDICATED WITH FINISH TAGS SUCH AS F1, B1, WI, ETC.).
- C. LINE OF TRANSITION BETWEEN DIFFERENT TYPES OF FLOOR COVERINGS IS INDICATED ON THE FINISH FLOOR PLANS. IN PLACES WHERE TWO DIFFERENT FLOOR COVERINGS ADJACENT, PROVIDE METAL TRANSITION STRIPS. SEE THE RELEVANT APPLICABLE FLOOR COVERING TRANSITION DETAILS INDICATED IN THIS CONSTRUCTION DOCUMENTS. WHERE TWO ROOMS ARE REQUIRED TO HAVE DIFFERENT FLOOR COVERINGS, LINE OF TRANSITION SHALL TYPICALLY OCCUR BELOW THE CENTER LINE OF THE DOOR LOCATED IN THE TWO ROOMS, AS INDICATED BY THE LINE OF TRANSITION BELOW THE DOOR IN THE FINISH FLOOR PLANS. CONTRACTOR SHALL PROVIDE METAL TRANSITION STRIPS (MANUFACTURED BY SCHLUTER OR EQUIVALENT). AT EXTERIOR DOORS, PROVIDE ALUMINUM THRESHOLD MATCHING THE DOORWAY. FOR REVEAL SURFACES, COORDINATE WITH DEMOLITION FLOOR PLAN AND NEW FLOOR PLAN TO DETERMINE WHERE NEW ABUTS EXISTING FLOOR COVERING THAT IS SCHEDULED TO REMAIN.
- D. LINE OF TRANSITION BETWEEN DIFFERENT TYPES OF WALL FINISH IS INDICATED ON THE INTERIOR ELEVATIONS AND FINISH FLOOR PLANS. FOR REQUIRED WALL PROTECTION TYPE (INDICATED WITH TAG WP1, WP2, ETC.), ON WALLS, COORDINATE WITH FINISH FLOOR PLANS AND INTERIOR ELEVATIONS.
- E. FINISHES ARE TO BE APPLIED TO SURFACES THAT ARE EXPOSED AND WILL REQUIRE A FINISH. SUCH MISCELLANEOUS SURFACES AS ARE INDICATED IN THE DRAWINGS WITH FINISH TAGS SUCH AS MS1, MS2, ETC.
- F. PAINT ALL EXPOSED VISIBLE ITEMS SUCH AS METAL DECK, STEEL ANGLES, STEEL BEAMS, STEEL TRUSSES, MISC. STEEL ITEMS, PIPES, CONDUITS, ETC. UNLESS SPECIFIED AS "NOT PAINT" OR "PAINT OVER". COORDINATE WITH FINISH FLOOR PLANS. WHERE EXPOSED SURFACES USE FIELD COLORS AND ACCENT COLORS SPECIFIED BY THE ARCHITECT. DO NOT PAINT CONCEALED SURFACES. FINISHED METAL SURFACES, OPERATING PARTS, AND PRE-FINISHED ITEMS. VERIFY PAINTING SURFACE (SUCH AS STEEL, CONCRETE, MASONRY, GYPSUM BOARD, WOOD, ETC.) AND COLOR (SUCH AS WHITE, BLACK, ETC.) WITH THE ARCHITECT. PROJECT MANUAL UNDER RELEVANT SPECIFICATION SECTION. ALL HOLLOW METAL DOOR AND WINDOW FRAMES SHALL BE PAINTED. USE SEMI-GLOSS FINISH ON DOOR FRAMES.
- G. IN ROOMS AND AREAS WHERE GYPSUM BOARD CEILING IS INDICATED, PAINT CEILING WITH THE SAME COLOR AS EXPOSED ADJACENT WALLS. IN WET ROOMS LIKE RESTROOMS, ETC., WHERE EXPOSED, PAINT INDICATED AS A REQUIREMENT ON WALLS. PAINT CEILINGS AND SOFFITS WITH EPOXY WHITE PAINT. ALL GYPSUM BOARD SOFFITS SHALL BE PAINTED. COORDINATE ACCENT COLOR LOCATIONS WITH ARCHITECT WHEREVER INDICATED.
- H. SEE INTERIOR ELEVATIONS FOR PLASTIC LAMINATE FINISHES OVER CABINETS, COUNTERTOPS, WALLS, ETC. PLASTIC LAMINATE FINISHES ARE INDICATED AS PL1, PL2, ETC. COUNTERTOPS THAT ARE MONOLITHIC MATERIAL (SUCH AS SOLID SURFACE, QUARTZ, ETC. AND NOT PLASTIC LAMINATE WRAPPED) ARE INDICATED AS MM1, MM2, ETC.
- I. WHERE PORCELAIN AND/OR CERAMIC TILE FINISHES ARE INDICATED, PROVIDE METAL EDGE STRIPS (MANUFACTURED BY SCHLUTER OR EQUIVALENT) AT ALL DOORS AND SHOWER DOORS. COORDINATE WITH DOOR ELEVATIONS.
- J. IN ROOMS AND AREAS (SUCH AS TOILET ROOMS, SHOWERS, ETC.) WHERE CERAMIC OR PORCELAIN TILES ARE INDICATED FOR WALL AND FLOOR FINISH, INSTALL BOTTOM ROW OF WALL TILE FIRST PER DETAIL 1/A603B. PROVIDE QUARTZ THRESHOLD AT DOORS TO TOILET ROOMS THAT ARE USED BY MULTIPLE USERS. SEE DETAILS 3 & 4 SHEET A603B.
- K. WHERE GYPSUM BOARD WALL ABUTS MASONRY WALL, PROVIDE REVEAL AS PER DETAIL 2/A603B.





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Project #: 250777

Grille, Register, and Diffuser Schedule			
ID	Manufacturer and Model	Count	Description
CD1	TITUS OMNI	20	STYLE: SQUARE PLATE FACE CEILING DIFFUSER CONSTRUCTION: STEEL FINISH: POWDER COAT WITH COLOR SELECTED BY ARCHITECT MOUNTING SURFACE OR LAY-IN BASED ON CEILING TYPE. PROVIDE FRAME TYPE 1 FOR SURFACE MOUNT AND FRAME TYPE 3 FOR LAY-IN. FACE SIZE: 24"X24", 20"X20", OR 12"X12". VERIFY FACE SIZE WITH ARCHITECT AND ENGINEER. CORE: REMOVABLE MAX NC: 20 DAMPER: NONE CONNECTION: ROUND OR RECTANGULAR OF SIZE SHOWN ON DRAWINGS. PROVIDE ADAPTER FITTINGS AS REQUIRED. APPLICATION: VARIABLE AIR VOLUME SUPPLY
CD2	PRICE ULFD-HEPA-LED	4	17"X24" LAMINAR FLOW DIFFUSER WITH INTEGRAL LIGHTS. ALUMINUM FACE/FRM WITH WHITE ANTIMICROBIAL EPOXY POWDERCOAT FINISH. ROOM SIDE ADJUSTABLE DRIVER BOX. PROVIDE WITH HEPA FILTERS. FACE TO MATCH ARCHITECTURAL DIFFUSER LAYOUT. PROVIDE WITH NECK SIZE AS SHOWN ON DRAWINGS.
CD3	PRICE ULFD-HEPA-LED	2	20"X24" LAMINAR FLOW DIFFUSER WITH INTEGRAL LIGHTS. ALUMINUM FACE/FRM WITH WHITE ANTIMICROBIAL EPOXY POWDERCOAT FINISH. ROOM SIDE ADJUSTABLE DRIVER BOX. PROVIDE WITH HEPA FILTERS. FACE TO MATCH ARCHITECTURAL DIFFUSER LAYOUT. PROVIDE WITH NECK SIZE AS SHOWN ON DRAWINGS.
CD4	PRICE ULFD-HEPA-LED TITUS PWR	6	48"X24" LAMINAR FLOW DIFFUSER WITH INTEGRAL LIGHTS. ALUMINUM FACE/FRM WITH WHITE ANTIMICROBIAL EPOXY POWDERCOAT FINISH. ROOM SIDE ADJUSTABLE DRIVER BOX. PROVIDE WITH HEPA FILTERS. FACE TO MATCH ARCHITECTURAL DIFFUSER LAYOUT. PROVIDE WITH NECK SIZE AS SHOWN ON DRAWINGS.
EG1		1	STYLE: SQUARE PERFORATED FACE CEILING GRILLE CONSTRUCTION: STEEL FINISH: SELECTED BY ARCHITECT MOUNTING SURFACE OR LAY-IN BASED ON CEILING TYPE. PROVIDE FRAME TYPE 1 FOR SURFACE MOUNT AND FRAME TYPE 3 FOR LAY-IN. FACE SIZE: 48"X24", 24"X24", 24"X12", 20"X20", 16"X16", OR 12"X12" AS SHOWN ON PLANS. VERIFY FACE SIZE WITH ARCHITECT AND ENGINEER. MAX NC: 20 DAMPER: NONE CONNECTION: ROUND OR RECTANGULAR OF SIZE SHOWN ON DRAWINGS. PROVIDE ADAPTER FITTINGS AS REQUIRED. APPLICATION: EXHAUST OR RELIEF MINIMUM FREE AREA: 50%
RG1	TITUS PWR	7	STYLE: OVERLINED FACE CEILING GRILLE CONSTRUCTION: STEEL FINISH: SELECTED BY ARCHITECT MOUNTING SURFACE OR LAY-IN BASED ON CEILING TYPE. PROVIDE FRAME TYPE 1 FOR SURFACE MOUNT AND FRAME TYPE 3 FOR LAY-IN. FACE SIZE: 48"X24", 24"X24", 24"X12", 20"X20", 16"X16", OR 12"X12" AS SHOWN ON PLANS. VERIFY FACE SIZE WITH ARCHITECT AND ENGINEER. MAX NC: 20 DAMPER: NONE CONNECTION: ROUND OR RECTANGULAR OF SIZE SHOWN ON DRAWINGS. PROVIDE ADAPTER FITTINGS AS REQUIRED. APPLICATION: AIR TRANSFER MINIMUM FREE AREA: 50%
SWR1	TITUS 350	2	2" OVERLINED FACE SIDEWALL GRILLE CONSTRUCTION: STEEL - HEAVY DUTY FINISH: POWDER COAT WITH COLOR SELECTED BY ARCHITECT MOUNTING SURFACE MOUNT FACE SIZE: 35" X 10" AS SHOWN ON DRAWINGS. VERIFY FACE SIZE WITH ARCHITECT AND ENGINEER. CORE: REMOVABLE MAX NC: 20 DAMPER: NONE CONNECTION: RECTANGULAR OF SIZE SHOWN ON DRAWINGS. PROVIDE ADAPTER FITTINGS AS REQUIRED. APPLICATION: RETURN HANDLES: 1/2" TURN, 35 DEG DEFLECTION, SINGLE BLADE, BLADES PARALLEL TO FLOOR MINIMUM FREE AREA: 50%
SWR2	TITUS 350R-SS	4	4" OVERLINED FACE SIDEWALL GRILLE CONSTRUCTION: STEEL - HEAVY DUTY FINISH: POWDER COAT WITH COLOR SELECTED BY ARCHITECT MOUNTING SURFACE MOUNT FACE SIZE: 35" X 10" AS SHOWN ON DRAWINGS. VERIFY FACE SIZE WITH ARCHITECT AND ENGINEER. CORE: REMOVABLE MAX NC: 20 DAMPER: NONE CONNECTION: RECTANGULAR OF SIZE SHOWN ON DRAWINGS. PROVIDE ADAPTER FITTINGS AS REQUIRED. APPLICATION: RETURN VANE SPACER: 3/8" SPACING, 35 DEG DEFLECTION, SINGLE BLADE, BLADES PARALLEL TO FLOOR MINIMUM FREE AREA: 50%

FAN SCHEDULE																
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	AIR TYPE	MAXIMUM AIRFLOW (CFM)	STATIC PRESSURE (IN WATER)	FAN			ELECTRICAL			SOUND		PHYSICAL LENGTH/ WIDTH/ HEIGHT (IN)	NOTES
							OUTLET VELOCITY (FPM)	FAN SPEED (RPM)	FAN WHEEL DIAMETER (IN)	STATIC EFFICIENCY (%)	MOTOR SIZE (HP)	MOTOR BHP (HP)	VOLT/PH/Hz	dBA (INLET/OUTLET)		
SF-1	GREENHECK SQ-18-M2-VG	CORRIDOR	INLINE	SUPPLY	4100	1.5	835	1477	22.25	60	3	1.6	460/3/60	68/71	30/30/27	ALL
RF-1	GREENHECK SQ-18-M2-VG	CORRIDOR	INLINE	RETURN	3400	0.75	692	1112	22.25	60	2	0.66	460/3/60	62/65	30/30/27	ALL

AIR CONTROL VALVE SCHEDULE																													
AREA SERVED	ID	MANUFACTURER AND MODEL NUMBER	SUPPLY			AIR	INLET DIA (IN)	MAXIMUM AIRFLOW (CFM)	MINIMUM AIRFLOW (CFM)	AIRFLOW DRIVING FACTOR	ENTERING AIR TEMP DB (DEG. F)	LEAVING AIR TEMP DB (DEG. F)	S.P. LOSS CFM (IN H20)	TOTAL LOAD (MBH)	HEAT FLOW (GPM)	ENTERING/ LEAVING FLUID TEMP (DEG. F)	FLUID WORKING	MAX FLUID PRESSURE DROP (FT)	COIL ID	S.P. LOSS AT MAX CFM (IN H20)	AT MAX CFM (FPM)	MIN. COIL ROWS	MIN. FINS (FPI)	AIR VELOCITY	COIL SIZE W x H (IN)	PIPE SIZE OR 3-WAY VALVE (IN)	2-WAY VALVE	3-WAY VALVE	NOTES
			OR 1	SV-1	ACCUTROL ATC000		14	1680			52	80			0.16	38.6	3.0	160/135	WATER	2.0	HC-01	0.5	2	10	500	26 x 20	1/2	3-WAY	1-4
OR 2	SV-2	ACCUTROL ATC000	14	1680	AIR CHANGE	52	80	0.16	38.6	3.0	160/135	WATER	2.0	HC-02	0.5	2	10	500	26 x 20	1/2	3-WAY	1-4							
OR 1	RV-01	ACCUTROL ATC000	14	1480	1480	52	80	0.16	38.6	3.0	160/135	WATER	2.0	HC-03	0.5	2	10	500	26 x 20	1/2	3-WAY	1-4							
OR 2	RV-02	ACCUTROL ATC000	14	1480	1480	52	80	0.16	38.6	3.0	160/135	WATER	2.0	HC-04	0.5	2	10	500	26 x 20	1/2	3-WAY	1-4							

VAV BOX LEVEL 2 SCHEDULE																	NOTE					
Existing (E)	ID	Level	Manufacturer	Inlet Size	Cooling Airflow	Heating Airflow	Min Airflow	Entering Air Temperature	Leaving Air Temperature	S.P. Loss at Max CFM	Flow Rate	Entering Water Temperature	Leaving Water Temperature	Working Fluid	Head Loss Feet	Min. Number of Row/Fins Per Inch	Valve Type	NOTE				
																	1	2	3	4	5	6

EQUIPMENT SCHEDULE

EQUIPMENT SCHEDULE											
EQUIPMENT SCHEDULE KEY			NOTES:				GENERAL NOTES:				
E - DIVISION 26 Q - FURNISHED WITH EQUIPMENT, INSTALLED BY DIV.26			1. PROVIDE MANUAL STARTER WITH THERMAL OVERLOAD AND RELAY FOR ATC/BAS CONTROL. 2. PROVIDE FUSED DISCONNECT ELEVATOR POWER MODULE WITH SHUNT TRIP. 3. INDOOR UNITS FED FROM OUTDOOR UNIT. PROVIDE DISCONNECTS FOR BOTH.				1. LOCATE ELECTRICAL EQUIPMENT IN ACCESSIBLE LOCATION, SUCH THAT IT IS WITHIN SIGHT OF THE EQUIPMENT IT IS SERVING, AND COMPLIES WITH N.E.C. REQUIRED CLEARANCES. 2. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND SIZE FEEDER, STARTER, DISCONNECT AND OVERCURRENT PROTECTION IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OF ACTUAL EQUIPMENT SUPPLIED. 3. ELECTRICAL CONTRACTOR SHALL REVIEW OTHER DIVISION DRAWINGS FOR ANY ADDITIONAL REQUIREMENTS PRIOR TO BID. 4. ELECTRICAL CONTRACTOR SHALL REVIEW OTHER DIVISION SUBMITTALS FOR ANY EQUIPMENT REQUIRING CONNECTION BY ELECTRICAL CONTRACTOR AND COORDINATE ALL REQUIREMENTS PRIOR TO ROUGH-IN.				

BRANCH CIRCUIT CONDUCTOR AND CONDUIT SIZING TABLE

CIRCUIT AMPACITY/VOLTAGE	CIRCUIT LENGTH	CONDUCTOR SIZE (PHASE, NEUTRAL AND GR)	CONDUIT SIZE
20A/120V	0' - 60'	#12 AWG	0.75" Ø
20A/120V	60' - 95'	#10 AWG	0.75" Ø
20A/120V	95' - 150'	#8 AWG	1" Ø
20A/120V	150' - 240'	#6 AWG	1.25" Ø
20A/277V	0' - 140'	#12 AWG	0.75" Ø
20A/277V	140' - 220'	#10 AWG	0.75" Ø
20A/277V	220' - 350'	#8 AWG	1" Ø
20A/277V	350' - 550'	#6 AWG	1.25" Ø

GENERAL SHEET NOTES

CONDUIT SIZING TABLE	
DUCTOR SIZE (NEUTRAL AND GR)	CONDUIT SIZE
2 AWG	0.75" Ø
0 AWG	0.75" Ø
8 AWG	1" Ø
6 AWG	1.25" Ø
2 AWG	0.75" Ø
0 AWG	0.75" Ø
8 AWG	1" Ø
6 AWG	1.25" Ø

1 PROVIDE NEMA 3R ENCLOSURES FOR EQUIPMENT LOCATED OUTDOORS. REFER TO PLANS FOR EQUIPMENT LOCATIONS.

2 REFER TO PLANS FOR CONSTRAINTS ON PHYSICAL DIMENSIONS AND CLEARANCE REQUIREMENTS OF EQUIPMENT. PROVIDE EQUIPMENT DIMENSIONS THAT FALL WITHIN THE CONSTRAINTS OF EACH SPECIFIC LOCATION.

3 ALL EQUIPMENT SHALL BE CONSTRUCTED AND BRACED FOR THE SEISMIC CONDITIONS OF THE PROJECT. REFER TO ELECTRICAL SPECIFICATIONS FOR REQUIREMENTS.

4 PROVIDE PERFORMANCE TESTING FOR GROUND-FAULT PROTECTION SYSTEMS ON SITE WITH A WRITTEN RECORD OF THIS TEST SUBMITTED TO THE AUTHORITY HAVING JURISDICTION PER NEC 230.95(C).

SHEET KEYNOTES



11/19/2025

COPPER CONDUCTOR AND CONDUIT SCHEDULE

— SCHEDULE NUMBER
— SUBSCRIPT (NOTE 5) (E.G.) 5C IG

CONDUCTOR AND CONDUIT SCHEDULE NOTES

DUCTORS SHOWN ARE SHOWN FOR EACH CONDUIT WITH MODIFICATIONS NOTED IN NOTE 5. ALL CONDUCTORS SHOWN ARE THWN UNLESS OTHERWISE NOTED.

VIDE EQUIPMENT GROUND CONDUCTORS PER TABLE 250-122 WHEN CIRCUIT BREAKERS ARE SIZED GREATER THAN AMPERE RATING SHOWN IN LE.

VIDE #10 NEUTRALS FOR MULTIWIRE BRANCH CIRCUITS SERVING COMPUTERS.

OUND (G) CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE DUCTORS.

BOL SUBSCRIPTS:

": INCLUDE TWO NEUTRAL CONDUCTORS SIZED AS SCHEDULED FOR PHASE AND NEUTRAL CONDUCTORS WHERE THE CONDUCTOR IS #1/0 OR LARGER. INCLUDE A SINGLE 200% RATED CONDUCTOR THAT IS TWICE THE AMPACITY OF THE SCHEDULED PHASE AND NEUTRAL CONDUCTOR WHERE THE CONDUCTOR IS BELOW #1/0 IN SIZE.

": PROVIDE CIRCUIT INTEGRITY CABLE; TYPE TWO-HOUR FIRE RESISTIVE CABLES IN CONDUIT OR PROVIDE FEEDER ENCASED IN CONCRETE.

": FULL SIZE GROUND, SIZE EQUIPMENT GROUNDING CONDUCTOR TO BE SAME SIZE AS THE PHASE CONDUCTORS.

": NEUTRAL CURRENTS EXIST DUE TO HIGH HARMONIC "NONLINEAR" LOADS. CURRENT CARRYING CONDUCTORS DERATED ACCORDINGLY. PROVIDE THE IG/HH SIZE FOR THE EQUIPMENT GROUNDING CONDUCTOR.

": INCLUDE IG (INSULATED/ISOLATED GROUND CONDUCTOR) SCHEDULED ALONG WITH THE GROUND OF EQUIPMENT GROUND CONDUCTOR.

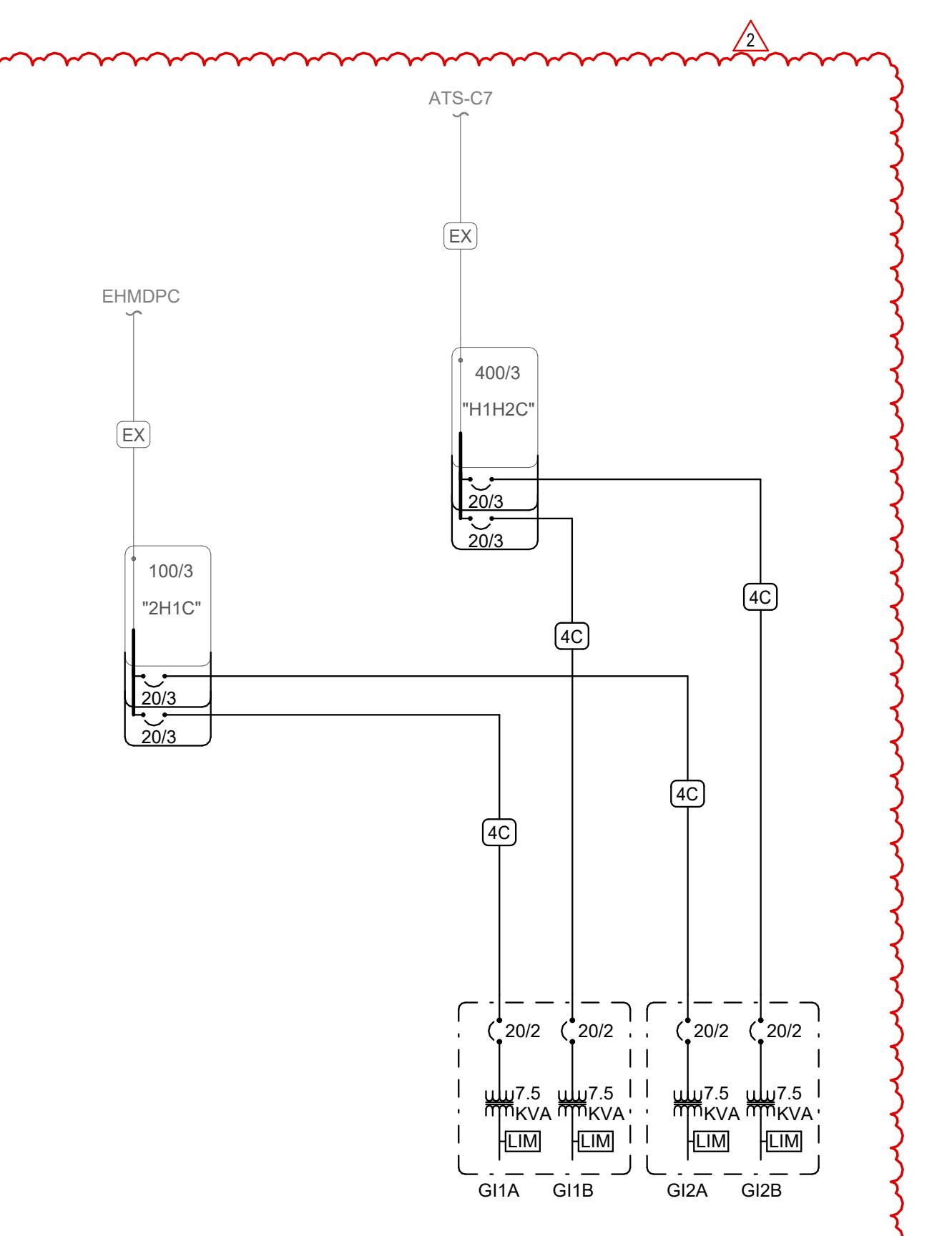
": PROVIDE FEEDER IN METAL-CLAD CABLE; TYPE MC IN PLACE OF SINGLE CONDUCTORS IN CONDUIT.

": SUBSTITUTE "SE" CONDUCTOR FOR "G" CONDUCTOR SHOWN, WHICH IS SIZED FOR THE GROUNDING OF THE SECONDARY OF THE SEPARATELY DERIVED SYSTEM.

R": PROVIDE SERVICE-ENTRANCE CABLE; TYPE SE OR SER IN PLACE OF SINGLE CONDUCTORS IN CONDUIT.

EWAY ONLY. CONDUCTORS PROVIDED BY UTILITY.

AMP	HH AMPS	CONDUIT SIZE	CONDUTOR (NOTE 1)			IG/HH	SE	NOTES
			QTY	SIZE	G			
20	-	0.75	2	12	12	12	8	2
20	-	0.75	3	12	12	12	8	2
20	24	0.75	4	12	12	12	8	2
30	-	0.75	2	10	10	10	8	2
30	-	0.75	3	10	10	10	8	2
30	32	0.75	4	10	10	10	8	2
40	-	1	2	8	10	8	6	2
40	-	1	3	8	10	8	6	2
40	44	1	4	8	10	8	6	2
55	-	1	2	6	10	8	4	2
55	-	1	3	6	10	8	4	2
55	60	1.25	4	6	10	8	4	2
70	-	1	2	4	8	4	2	2
70	-	1.25	3	4	8	4	2	2
70	76	1.25	4	4	8	4	2	2
85	-	1.25	2	3	8	3	2	2
85	-	1.25	3	3	8	3	2	2
85	92	1.25	4	3	8	3	2	2
95	-	1.25	3	2	8	2	2	2
95	104	1.5	4	2	8	2	2	2
130	-	1.5	3	1	6	2	2	2
130	116	1.5	4	1	6	2	2	2
150	-	2	3	1/0	6	2	1/0	2
150	136	2	4	1/0	6	2	1/0	2
200	180	2.5	4	3/0	6	2	2/0	2
230	-	2.5	3	4/0	4	2	2/0	2
230	208	2.5	4	4/0	4	2	2/0	2
310	280	3	4	350	3	1/0	3/0	2
380	-	3.5	3	500	3	3/0	3/0	2
400	-	2 EA 2	3	3/0	3	3/0	3/0	2
400	360	2 EA 2.5	4	3/0	3	3/0	3/0	2
620	560	2 EA 3	4	350	1/0	4/0	3/0	2



Intermountain Health Riverton Hospital GI - ASC

3741 W 12600 S
Riverton, UT 84065

ONE-LINE DIAGRAM

SECTION 08 7100

DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. **This Section includes** items known commercially as finish or door hardware that are required for swing, sliding, and folding doors, except special types of unique hardware specified in the same sections as the doors and door frames on which they are installed.
- B. This **Section includes** the following:
 - 1. Butt hinges
 - 2. Continuous hinges
 - 3. Lock cylinders and keys
 - 4. Lock and latch sets
 - 5. Exit devices
 - 6. Closers
 - 7. Overhead holders
 - 8. Overhead stops
 - 9. Door trim units
 - 10. Auto operators
 - 11. ADA bollard with provision for card reader.
- C. **Related Sections:** The following Sections contain requirements that relate to this Section:
 - 1. **Division 8** Section "**Steel Doors and Frames**" for silencers integral with hollow metal frames.
 - 2. **Division 8** Section "**Flush Wood Doors**" for factory prefitting and factory pre-machining of doors for door hardware.
 - 3. **Division 8** Section "**Flush Wood Doors**" for hardware related to double-acting stainless steel clad doors.
 - 4. **Division 8** Section "**Aluminum Entrances and Storefronts**" for aluminum entrance door hardware installation.

1.3 SUBMITTALS

- A. **General:** Submit the following in accordance with Conditions of Contract and Division 1 Specification sections.
- B. **Product Data:** Provide product data including manufacturers' technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
- C. **Hardware Schedule:** Provide a hardware schedule coordinated with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware. Schedules shall be in vertical format, listing each door opening.
 - 1. **Hardware Schedule Content:** Based on hardware indicated, organize schedule into "hardware sets" indicating complete designations of every item required for each door

or opening. Include the following information:

- a. **Type**, style, function, size, and finish of each hardware item.
- b. **Name** and manufacturer of each item.
- c. **Fastenings** and other pertinent information.
- d. **Location** of each hardware set cross-referenced to indications on Drawings both on floor plans and in door and frame schedule.
- e. **Explanation of all abbreviations**, symbols, and codes contained in schedule.
- f. **Mounting locations** for hardware.
- g. **Door and frame** sizes and materials.
- h. **Keying** information.
- i. **Wiring diagrams** with theory of operation.
- j. **Submittal Sequence**: Submit schedule at earliest possible date particularly where acceptance of hardware schedule must precede fabrication of other work that is critical in the Project construction schedule. Include with schedule the product data, samples, shop drawings of other work affected by door hardware, and other information essential to the coordinated review of schedule.
- k. **Keying Schedule**: Submit separate detailed schedule indicating clearly how the Owner's final instructions on keying of locks has been fulfilled.
- l. **Electrical Coordination: Provide electrified hardware coordination drawings in order to** coordinate the hardware with the electrical and security subcontractors.
- m. **Submit catalog cuts** or product data sheets for all scheduled finish hardware.

2. **Samples**: Provide samples of each type of exposed hardware unit in finish indicated and tagged with full description for coordination with schedule. Submit samples prior to submission of final hardware schedule, **if requested** by the Architect.

- a. **Samples will be returned to the supplier**. Units that are acceptable and remain undamaged through submittal, review, and field comparison process may, after final check of operation, be incorporated in the Work, within limitations of keying coordination requirements.

3. **Templates**: Provide templates for doors, frames, and other work specified to be factory prepared for the installation of door hardware. Check shop drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.

1.4 ELECTRONIC HARDWARE SYSTEMS

- A. **Provide complete wiring diagrams** prepared by an authorized factory employee for each opening requiring electronic hardware, except openings where only magnetic hold-open devices are specified. Provide a copy with each hardware schedule submitted after approval.
- B. **Provide complete operational descriptions** of electronic components listed by opening in the hardware submittals. Operational descriptions to detail how each electrical component functions within the opening incorporating all conditions of ingress and egress. Provide a copy with each hardware schedule submitted for approval.
- C. **Provide elevation drawings** of electronic hardware and systems identifying locations of the system components with respect to their placement in the door opening. Provide a copy with each hardware schedule submitted for approval.
- D. Prior to installation of electronic hardware, **arrange conference** between supplier, installers and related trades to review materials, procedures and coordinating related work.
- E. **The electrical products contained within this specification represent a complete**

engineered system. If alternate electrical products are submitted, it is the responsibility of the distributor to bear the cost of providing a complete and working system including re-engineering of electrical diagrams and system layout, as well as power supplies, power transfers and all required electrical components. Coordinate with electrical engineer and electrician to ensure that line voltage and low voltage wiring is coordinated to provide a complete and working system.

- F. For each item of electrified hardware specified, **provide standardized molex plug connectors** to accommodate up to twelve (12) wires. Molex plug connectors shall plug directly into through-door wiring harnesses, frame wiring harnesses, electric locking devices and power supplies.
- G. **Integrated wiegand products** shall be supplied only through designated ASSA ABLOY "Authorized Channel Partner" (ACP) distributors. Installation of integrated wiegand products shall be performed by an ASSA ABLOY "Certified Integrator" (CI).

1.5 QUALITY ASSURANCE

- A. **Manufacturer (Single Source Responsibility):** Obtain each type of hardware (latch and lock sets, hinges, etc.) from single manufacturer, although several may be indicated as offering products complying with requirements.
- B. **Supplier Qualifications:** A recognized architectural door finish hardware supplier, with warehousing facilities in the Project's vicinity, that has a record of successful in-service performance for supplying door hardware similar in quantity, type, and quality to that indicated for this project and that employs an experienced and full-time Architectural Hardware Consultant (AHC) who is available, at reasonable times during the course of the work, for consultation about project's hardware requirements, to Owner, Architect and Contractor.
- C. **Fire-Rated Openings:** Provide door hardware for fire-rated openings that complies with NFPA Standard No. 80 and requirements of authorities having jurisdiction. Provide only items of door hardware that are listed and are identical to products tested by UL, Warnock Hersey, FM, or other testing and inspecting organization acceptable to authorities having jurisdiction for use on types and sizes of doors indicated in compliance with requirements of fire-rated door and door frame labels.
 - 1. Project requires door assemblies and components that are compliant with positive pressure and S-label requirements. Specifications must be cross-referenced and coordinated with door manufacturers to ensure that total opening engineering is compatible with UL10C Standard for Positive Pressure Fire Tests of Door Assemblies.
 - a. Hardware required for fire doors shall be listed with Underwriters Laboratories for ratings specified.
 - b. Certification(s) of compliance shall be made available upon request by the Authority Having Jurisdiction.
- D. **Emergency Exit Devices:** Where emergency exit devices are required on fire-rated doors (with supplementary marking on doors with labels indicating "Fire Door to be Equipped with Fire Exit Hardware") provide labels on exit devices indicating "Fire Exit Hardware".
- E. **Hardware Installers** must have a minimum of five (5) years experience in installation of hardware. Provide verification of installer's qualification for approval. All installers to attend review meetings with the hardware distributor.

1.6 PRODUCT HANDLING

- A. **Tag each item** or package separately with identification related to final hardware schedule, and include basic installation instructions with each item or package.
- B. **Packaging of door hardware is responsibility of supplier.** As material is received by hardware supplier from various manufacturers, sort and repackage in containers clearly marked with appropriate hardware set number to match set numbers of approved hardware schedule. Two or more identical sets may be packed in same container. Each package shall be complete, with all necessary screws and accessories. No keys, other than construction master keys or temporary keys are to be packed in boxes with the locks.
- C. **Inventory** door hardware jointly with representatives of hardware supplier and hardware installer until each is satisfied that count is correct.
- D. **Deliver** individually packaged door hardware items promptly to place of installation (shop or Project site).
- E. **Provide secure lock-up** for door hardware delivered to the Project, but not yet installed. Control handling and installation of hardware items that are not immediately replaceable so that completion of the Work will not be delayed by hardware losses both before and after installation. Any shortage or damaged product shall be made good without cost to the Owner.

1.7 MAINTENANCE

- A. **Maintenance Tools and Instructions:** Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.
- B. Upon completion of construction and building turnover, furnish two (2) complete maintenance manuals to the Owner. Manuals to include the following items:
 1. Approved hardware schedule, catalog cuts and keying schedule.
 2. Hardware installation and adjustment instructions.
 3. Manufacturer's written warranty information.
 4. Wiring diagrams, elevation drawings and operational descriptions for all electronic openings.

1.8 PRE-INSTALLATION CONFERENCE

- A. **Pre-installation conference** shall be conducted prior to installation of hardware at Project site. Meet with the Owner, Architect, Contractor, installer, and manufacturers' representatives. Notify participants at least ten (10) working days before conference.
- B. **A separate pre-installation conference** shall be conducted prior to the installation of electronic security hardware with the electrical contractor to review catalogs, brochures, templates, installation instructions, and the approved hardware schedule. Survey installation procedures and workmanship, with special emphasis on unusual conditions, as to ensure correct technique of installation, and coordination with other work. Notify participants at least ten (10) working days before conference.

1.9 WARRANTY

A. All items, except as noted below, shall be warranted in writing by the manufacturer against failure due to defective materials and workmanship for a minimum period of one (1) year commencing on the date of final completion and acceptance. In the event of product failure, promptly repair or replace item with no additional cost to the Owner.

1. Cylindrical locksets - Heavy Duty: Seven (7) years
2. Exit Devices: Five (5) years
3. Door closers: Ten (10) years
4. Securitron (and approved equals) electrified hardware: Unlimited Lifetime

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Catalog numbers used in the Hardware Schedule were taken from the indicated manufacturers and all finish hardware shall be either the hardware specifically described or an equal product approved by the Architect from the manufacturers listed below as "acceptable manufacturers".

B. Obtain each type of finish hardware (hinges, latch and locksets, exit devices, etc.) from a single manufacturer.

HARDWARE	SPECIFIED MFR	ACCEPTABLE MANUFACTURERS
Butts	McKinney	Stanley, Hager,
Continuous hinge	Markar	None
Locks	Accentra	None
Cylinders	ASSA	None
Door Closers	Accentra	None
Trims/Kick Plates	Rockwood	McKinney, Trimco
Thresholds	Pemko	McKinney, Zero
Weather stripping	Pemko	McKinney, Zero
Stops	Rockwood	McKinney, Trimco

C. Hardware manufacturers shall be those noted here and also as noted in specific product descriptions below.

2.2 SCHEDULED HARDWARE

A. **Requirements for design**, grade, function, finish, size, and other distinctive qualities of each type of finish hardware are indicated in the "Hardware Schedule" at the end of this Section. Products are identified by using hardware designation numbers of the following:

1. **Manufacturer's Product Designations:** The product designation and name of one manufacturer are listed for each hardware type required for the purpose of establishing minimum requirements. Provide either the product designated or, where more than one manufacturer is specified under the Article "Manufacturers" in Part 2 for each hardware type, the comparable product of one of the other manufacturers that complies with requirements.
2. **ANSI/BHMA** designations used elsewhere in this Section or in schedules to describe hardware items or to define quality or function are derived from the following standards. Provide products complying with these standards and requirements specified elsewhere in this Section.
 - a. **Butts and Hinges:** ANSI/BHMA A156.1.
 - b. **Bored and Preassembled Locks and Latches:** ANSI/BHMA A156.2.
 - c. **Exit Devices:** ANSI/BHMA A156.3.

- d. **Door Controls - Closers:** ANSI/BHMA A156.4.
- e. **Auxiliary Locks and Associated Products:** ANSI/BHMA A156.5.
- f. **Architectural Door Trim:** ANSI/BHMA A156.6.
- g. **Template Hinge Dimensions:** ANSI/BHMA A156.7.
- h. **Door Controls - Overhead Holders:** ANSI/BHMA A156.8.
- i. **Interconnected Locks and Latches:** ANSI/BHMA A156.12.
- j. **Mortise Locks and Latches:** ANSI/BHMA A156.13.
- k. **Sliding and Folding Door Hardware:** ANSI/BHMA A156.14.
- l. **Closer Holder Release Devices:** ANSI/BHMA A156.15.
- m. **Auxiliary Hardware:** ANSI/BHMA A156.16.
- n. **Self-Closing Hinges and Pivots:** ANSI/BHMA A156.17.
- o. **Materials and Finishes:** ANSI/BHMA A156.18.

2.3 MATERIALS AND FABRICATION

- A. **Manufacturer's Name Plate:** Do not use manufacturers' products that have manufacturer's name or trade name displayed in a visible location (omit removable nameplates) except in conjunction with required fire-rated labels and as otherwise acceptable to Architect.
 - 1. **Manufacturer's identification** will be permitted on rim of lock cylinders only.
 - 2. **Base Metals:** Produce hardware units of basic metal and forming method indicated, using manufacturer's standard metal alloy, composition, temper, and hardness, but in no case of lesser (commercially recognized) quality than specified for applicable hardware units by applicable ANSI/BHMA A156 series standards for each type of hardware item and with ANSI/BHMA A156.18 for finish designations indicated. Do not furnish "optional" materials or forming methods for those indicated, except as otherwise specified.
 - 3. **Fasteners:** Provide hardware manufactured to conform to published templates, generally prepared for machine screw installation. Do not provide hardware that has been prepared for self-tapping sheet metal screws, except as specifically indicated.
 - a. **Furnish screws** for installation with each hardware item. Provide Phillips flat-head screws except as otherwise indicated. Finish exposed (exposed under any condition) screws to match hardware finish or, if exposed in surfaces of other work, to match finish of this other work as closely as possible including "prepared for paint" surfaces to receive painted finish.
 - b. **Provide concealed fasteners** for hardware units that are exposed when door is closed except to the extent no standard units of type specified are available with concealed fasteners. Do not use thru-bolts for installation where bolt head or nut on opposite face is exposed in other work unless their use is the only means of reinforcing the work adequately to fasten the hardware securely. Where thru-bolts are used as a means of reinforcing the work, provide sleeves for each thru-bolt or use sex screw fasteners.

2.4 HINGES, BUTTS, AND PIVOTS

- A. **Templates:** Except for hinges and pivots to be installed entirely (both leaves) into wood doors and frames, provide only template-produced units.
- B. **Screws:** Provide Phillips flat-head screws complying with the following requirements:
 - 1. For metal doors and frames install machine screws into drilled and tapped holes.
 - 2. For fire-rated wood doors install #12 x 1-1/4-inch, threaded-to-the-head steel wood screws.
 - 3. Finish screw heads to match surface of hinges or pivots.
- C. **Hinge Pins:** Except as otherwise indicated, provide hinge pins as follows:
 - 1. Out-Swing Exterior Doors: Non-removable pins (NRP).
 - 2. Out-Swing Corridor Doors with Locks: Non-removable pins (NRP).

3. Interior Doors: Non-rising pins.
4. Tips: Flat button and matching plug, finished to match leaves, except where hospital tip (HT) indicated.

D. **Number of Hinges:** Provide number of hinges indicated but not less than 3 hinges per door leaf for doors 90 inches or less in height. For doors 90+ to 120 inches high, provide four hinges, for heights of 120+ to 150 inches provide five hinges and so on for each 30 inch increment of height.

1. **Fire-Rated Doors:** Not less than 3 hinges per door leaf for doors 86 inches or less in height with same rule for additional hinges.

E. **Weight:** All hinges shall be heavy weight type, 0.180 inches.

F. **Hinges shall conform to ANSI A156.1** and have the number of knuckles specified, oil-impregnated bearings as specified with NRP feature at all exterior reverse bevel doors. Provide hinges in quantity as noted above.

1. Specified Manufacturer: McKinnney
2. Approved Substitutes: Hager, Stanley

2.6 LOCK CYLINDERS AND KEYING

A. **Match Existing System:** ASSA

B. **Keying Schedule:** Review the keying system with the Owner and provide the type required (master, grandmaster or great-grandmaster), integrate with the Owner's existing system.

C. **Provide cylinders and keys protected** from unauthorized manufacture and distribution by manufacturer's United States patents. The key design and tolerances shall permit the cutting of keys with standard code or duplicating machines. The requirement for a single-purpose or keyway-specific cutting or duplicating machine shall not be allowed. The key design and tolerances shall permit the use of keys and cylinders in existing key systems having similar keyways and sections.

D. **Cylinders:**

1. Specified Manufacturer: ASSA. System to be integrated with the facility master key system.
2. Approved Substitute: None.

E. **Provide interchangeable core cylinders at all exit devices.**

F. **Metals:** Construct lock cylinder parts from brass or bronze, stainless steel, or nickel silver.

G. **Master-keying:** Comply with Owner's instructions for master-keying and, except as otherwise indicated, provide individual change key for each lock that is not designated to be keyed alike with a group of related locks.

1. **Permanently inscribe each key** with number of lock that identifies cylinder manufacturer's key symbol, and notation, "**DO NOT DUPLICATE.**"

H. **Key Material:** Provide keys of nickel silver only.

I. **Key Quantity:**

1. **Two** (2) change keys per lock
2. **Three** (3) grand master keys
3. **Six** (6) master keys per master level

4. **Fifteen** (15) construction/temporary keys
5. **Five** (5) control keys

J. Change keys, Master keys and all high-security or restricted keyway blanks shall be sealed in tamper-proof packaged boxes when shipped from the factory. The boxes shall be shrink wrapped and imprinted to ensure the integrity of the packaging.

L. **Lockset Strikes**

1. Strikes shall be non-handed and available with curved lip, full lip or ASA type strikes as required. Provide strikes with lip-length required to accommodate jamb and trim detail and projection.

2.7 CYLINDER INSTALLATION

- A. The General Contractor shall install all construction cylinders/cores, at the time of hardware installation.
- B. When requested by the Owner or Architect, the General Contractor shall remove all construction cylinders and cores, and install all permanent cylinders and cores. Construction cylinders/cores are to be returned to the hardware supplier.

2.8 LOCKS, LATCHES, AND BOLTS

A. MORTISE LOCKSETS

- a. All locksets shall be ANSI 156.13 Series 1000, Grade 1 Certified. All functions shall be manufactured in a single sized case formed from 12 gauge steel minimum. The lockset shall have a field-adjustable, beveled armored front, with a .125" minimum thickness and shall be reversible without opening the lock body. The lockset shall be 2 3/4" backset with a one-piece 3/4" anti-friction stainless steel latchbolt. The deadbolt shall be a full 1" throw made of stainless steel and have 2 hardened steel roller inserts. All strikes shall be non-handed with a curved lip. To insure proper alignment, all trim, shall be thru-bolted and fully interchangeable between rose and escutcheon designs and shall be the product of one manufacturer.
 - 1) Specified Manufacturer: Yale 8800 Series
 - 2) Approved Substitutes: None

B. **Comply with UL requirements** for throw of bolts and latch bolts on rated fire openings.

C. **Flush Bolt Heads:** Minimum of 1/2" diameter rods of brass, bronze or stainless steel, with minimum 12" long rod for doors up to 7'-0" in height. Provide longer rods as necessary for doors exceeding 7'-0" in height.

D. **Provide dust-proof strikes** for foot bolts, except where special threshold construction provides non-recessed strike for bolt.

2.9 CLOSERS AND DOOR CONTROL DEVICES

A. **Size of Units:** Except as otherwise specifically indicated, comply with the manufacturer's recommendations for size of door control unit, depending upon size of door, exposure to weather and anticipated frequency of use. Maximum projection from surface of door: 2-3/4 inches.

- B. **Closers:** All door closers shall be of one manufacturer to provide for proper installation and servicing after installation. All closers shall be inspected after installation by a factory representative to ensure proper adjustment and operation. Closer shall carry a manufacturer's 10 year warranty for hydraulic units and 2 year warranty for electrical and/or handicap power assist door closers against manufacturing defects and workmanship.
- C. **Cylinder:** Shall be of high strength cast iron construction. All door exterior closers shall be tested to ANSI/BHMA A156.4 , Grade 1 test requirements by a BHMA certified independent testing laboratory. Cylinder shall have been manufactured and in the marketplace for a minimum of 10 years. A list of (10) year old projects using submitted closer shall be available upon request.
- D. **All door closers shall be fully hydraulic** and have full rack and pinion action. Pinion and pistons shall be hardened regardless of closer size. The closer shall incorporate tamper resistant non-critical screw valves of V-slot design to reduce possible clogging. Closer shall have separate and independent screw valve adjustments for latch speed, general speed and hydraulic backcheck. Backcheck shall be properly located so as to effectively slow the swing of the door at a minimum of 10 degrees in advance of the dead stop location.
- E. **All door closers shall pass UL10C** positive pressure fire test.
- F. **Parallel Arm Closers:** Shall incorporate one piece solid forged steel arms, steel stud shoulder bolts incorporated in regular arms, hold open arms, arms with stop built in, arms with hold open and stop built in. All other closers to have forged steel main arms for strength, and durability.
- G. **All closers to have a powder coat finish** on closer body, arm, metal cover and adapter plate. Powder coat finish shall exceed a minimum 100 hour salt spray test, as described in ANSI Standard A156.4 and ASTM B117.
- H. **Hydraulic Fluid:** All closers, with the exception of interior and interior electronic closers, shall utilize temperature stable fluid capable of withstanding temperature ranges of 120 degrees F. to -30F. without requiring seasonal adjustment of closer speed to properly close the door.
- I. **Supply all drop plates**, shoe supports, templates, etc. to properly install closers according to manufacturer's recommendations.
 - 1. **Specified Manufacturer:** Accentra
 - 2. **Approved Substitutes:** Norton
- J. **Closer Mounting:** Mount all closers with **thru bolts** using **sex bolts**. Also mount closers at **180 degree mounting** where door swing can be greater than **90 degrees**.

2.10 DOOR TRIM AND PROTECTIVE PLATES

- A. Kick plates shall be .050 gauges and two (2) inches less than door width on push side and one (1) inch less than door width on pull side; height as specified in headings. Coordinate and provide width required where possible conflicting hardware dictates otherwise. Push plates, pull plates, door pulls and miscellaneous door trim shall be as shown in the hardware schedule.
 - 1. **Specified Manufacturer:** Rockwood
 - 2. **Approved Substitutes:** McKinney, Trimco

2.11 DOOR STOPS AND HOLDERS

- A. **Wall Mounted Door Stops**
 - 1. Where a door is indicated on the plans to strike flush against a wall, wall bumpers shall be provided. Provide convex or concave design as indicated.
 - a. **Specified Manufacturer:** Rockwood
 - b. **Approved Substitutes:** McKinney, Trimco
- B. **Overhead Stops/Holders**
 - 1. Where specified, overhead stops/holders as shown in the hardware sets are to be provided. Track, slide, arm and jamb bracket shall be constructed of extruded bronze and shock absorber spring shall be of heavy tempered steel. Overhead stops shall be of non-handed design.
 - a. **Specified Manufacturers:** Rixson 9 Series

2.12 DOOR TRIM UNITS

- A. **Fasteners:** Provide manufacturer's standard exposed fasteners for door trim units consisting of either machine screws or self-tapping screws.
- B. **Fabricate protection plates** not more than 2 inches less than door width by height indicated.
 - 1. **Metal Plates:** Stainless steel, 0.050 inch (U.S. 18 gage).

2.13 WEATHERSTRIPPING AND SEALS

- A. **General:** Provide continuous weatherstripping on exterior doors and smoke, light, or sound seals on interior doors where indicated or scheduled. Provide noncorrosive fasteners for exterior applications and elsewhere as indicated.
- B. **Replaceable Seal Strips:** Provide only those units where resilient or flexible seal strip is easily replaceable and readily available from stocks maintained by manufacturer.
- C. **Weatherstripping at Jambs and Heads:** Provide bumper-type resilient insert and metal retainer strips, surface applied unless shown as mortised or semimortised, and of following metal, finish, and resilient bumper material:
 - 1. **Extruded aluminum** with color anodized finish as selected from manufacturer's standard color range, 0.062-inch minimum thickness of main walls and flanges.
- D. **Weatherstripping at Door Bottoms:** Provide threshold consisting of contact-type resilient insert and metal housing of design and size shown and of following metal, finish, and resilient seal strip:
 - 1. **Extruded aluminum** with color anodized finish as selected from manufacturer's standard color range, 0.062-inch minimum thickness of main walls and flanges.
 - 2. **Solid neoprene wiper** or sweep seal complying with MIL R 6855, Class II, Grade 40.

2.14 GASKETING AND THRESHOLDS

- A. Provide continuous weatherseal on exterior doors and smoke, light, or sound seals on interior doors where indicated or scheduled. Provide intumescent seals as required to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies. Provide only those units where resilient or flexible seal strip is easily replaceable and readily available from stocks maintained by manufacturer.

- B. Provide threshold units not less than 4" wide, formed to accommodate change in floor elevation where indicated, fabricated to accommodate door hardware and to fit door frames. All threshold units shall comply with the Americans with Disabilities Act (ADA).
 - 1. **Specified Manufacturers:** Pemko
 - 2. **Approved Substitutes:** McKinney, Reese, Zero

2.15 SILENCERS

- A. Furnish rubber door silencers all hollow metal frames; two (2) per pair and three (3) per single door frame.

2.16 HARDWARE FINISHES

- A. **Match items** to the manufacturer's standard color and texture finish for the latch and lock sets (or push-pull units if no latch or lock sets).
- B. **Provide finishes** that match those established by BHMA or, if none established, match the Architect's sample.
- C. **Provide quality of finish**, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware.
- D. **Provide protective lacquer coating** on all exposed hardware finishes of brass, bronze, and aluminum, except as otherwise indicated.
- E. Where specified hardware shall have an **antimicrobial coating** which permanently suppresses the growth of bacteria, algae, fungus, mold and mildew applied. The finish shall control the spread and growth of bacteria, mold and mildew and shall be FDA listed for use in medical and food preparation equipment.
- F. **The designations used in schedules** and elsewhere to indicate hardware finishes are those listed in **ANSI/BHMA A156.18, "Materials and Finishes,"** including coordination with the traditional U.S. finishes shown by certain manufacturers for their products.
- G. All trim in 626 or US26D dull chrome finish.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. **Install hardware** using only manufacturer supplied and approved fasteners in strict adherence with manufacturers published installation instructions. All hardware shall be applied and installed in accordance with best trade practice by an experienced hardware installer. Care shall be exercised not to mar or damage adjacent work.
- B. **Install head seal** prior to installation of "PA"-parallel arm mounted door closers and push side

mounted door stops/holders.

1. **Trim, cut and notch thresholds** and saddles neatly to minimally fit the profile of the door frame.
2. **Install thresholds** and saddles in a bed of caulking completely sealing the underside from water and air penetration.

C. **Counter sink through bolt of door pull** under push plate during installation.

D. **Mount hardware units at heights indicated** in following applicable publications, except as specifically indicated or required to comply with governing regulations and except as otherwise directed by Architect.

1. **"Recommended Locations for Builders Hardware for Standard Steel Doors and Frames"** by the Door and Hardware Institute.
2. **"Recommended Locations for Builders Hardware for Custom Steel Doors and Frames"** by the Door and Hardware Institute.
3. **NWWDA Industry Standard I.S.1.7, "Hardware Locations for Wood Flush Doors."**
4. **Provide blocking** in drywall partitions where wall stops are to be located.

E. **Install each hardware item** in compliance with the manufacturer's instructions and recommendations. Where cutting and fitting is required to install hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation or application of surface protection with finishing work specified in the **Division 9** Sections. Do not install surface-mounted items until finishes have been completed on the substrates involved.

1. **Set units level, plumb, and true** to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.
2. **Drill and countersink** units that are not factory prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.
3. **Set thresholds** for exterior doors in full bed of butyl-rubber or polyisobutylene mastic sealant complying with requirements specified in Division 7 Section "Joint Sealers."
4. **Weather Stripping and Seals:** Comply with manufacturer's instructions and recommendations to the extent installation requirements are not otherwise indicated.

F. **Boxed Power Supplies:** Locate power supplies as indicated. Verify location with Architect.

1. **Configuration:** Provide the least number of power supplies required to adequately serve doors with electrified door hardware.

3.2 FIELD QUALITY CONTROL

- A. Prior to the installation of hardware, manufacturer's representatives for locksets, closers, and exit devices shall arrange and hold a jobsite meeting to instruct the installing contractor's personnel on the proper installation of their respective products. A letter of compliance, indicating when this meeting is held and who is in attendance, shall be sent to the Architect and Owner.
- B. The hardware supplier shall do a final inspection prior to building completion to ensure that all hardware was correctly installed and is in proper working order.
- C. The manufacturer's representative shall do a final inspection prior to building completion to ensure that all hardware was correctly installed and is in proper working order.

3.3 ADJUSTING, CLEANING, AND DEMONSTRATING

- A. **Adjust and check each operating item** of hardware and each door to ensure proper

operation or function of every unit. Replace units that cannot be adjusted to operate freely and smoothly or as intended for the application made.

1. **Where door hardware is installed more than one month** prior to acceptance or occupancy of a space or area, return to the installation during the week prior to acceptance or occupancy and make final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.
2. **Clean adjacent surfaces** soiled by hardware installation.
3. **Instruct Owner's personnel** in the proper adjustment and maintenance of door hardware and hardware finishes and usage of any electronic devices.

B. Keys issued by the Owner to the Contractor shall be returned to the Owner upon Substantial Completion. The Contractor shall be responsible for all costs associated with rekeying the building if all keys are not accounted for and returned to the Owner.

3.4 HARDWARE SCHEDULE

- A. **General:** Provide hardware for each door to comply with requirements of Section "Door Hardware," hardware set numbers indicated in door schedule, and in the following schedule of hardware sets. Hardware sets indicate quantity, item, manufacturer and product designation, size, and finish or color, as applicable.
- B. Provide hardware for aluminum storefront and interior aluminum to ensure all hardware is provided from one source.
 1. Aluminum systems hardware provided by 08 7100 and installed by 08 4113.
- C. The following schedule is furnished for whatever assistance it may afford the Contractor; do not consider it as entirely inclusive. Should any particular door or item be omitted in any scheduled hardware heading, provide door or item with hardware same as required for similar purposes. Hardware supplier is responsible for handing and sizing all products as listed in the hardware heading. Quantities listed are for each pair of doors, or for each single door.
- D. Manufacturer's Abbreviations:
 1. MC - McKinney
 2. NO - Norton
 3. PE - Pemko
 4. RO - Rockwood
 5. YA - Accentra
 6. SN - Securitron
 7. RE - Record
 8. MA - Markar
 9. RX - Rixson
 10. HS -- HES

Set 01.0

Doors: A202A, A204A

3	Hinges	TA2714 4 1/2 X 4 1/2	26D	MC
1	Passage Set	PBR8801	626	YA
1	Closer	4400	689	YA
1	Wall Stop	409	US32D	RO
1	Silencers	608		RO

Set 01.1

Doors: A201A

3	Hinges	TA2714 4 1/2 X 4 1/2	26D	MC
1	Passage Set	PBR8801 – LEAD LINED	626	YA
1	Closer	4400	689	YA
1	Wall Stop	409	US32D	RO
1	Silencers	608		RO

Set 02

Doors: B209A

1	Hinge	FM300	32D	MC
1	Storeroom Lock	PBR8805	626	YA
1	Mortise Cylinder	By Owner		ASSA
1	Closer	4400	689	YA
1	Wall Stop	409	US32D	RO
1	Smoke Seal	S88		PE

Set 03

Doors: B202A, B202B, B121B, B201A

3	Hinges	TA2714 4 1/2 x 4 1/2	26D	MC
1	Classroom Lock	PBR8808	626	YA
1	Mortise Cylinder	By Owner		ASSA
1	Closer	4400	689	YA
1	Wall Stop	409	US32D	RO
1	Smoke Seal	S88		PE

Set 04.0

Doors: B205A

1	Hinge	FM300	630	MA
1	Passage Set	PBR8801	626	YA
1	Floor Stop	441	630	RO
1	Smoke Seal	S88	D	PE

Set 04.1

Doors: B206A

1	Hinge	FM300	630	MA
1	Passage Set	PBR8801 – LEAD LINED	626	YA
1	Floor Stop	441	630	RO
1	Smoke Seal	S88	D	PE

Set 05

Doors: B210A, B211A

3	Hinges	TA2714 4 1/2 x 4 1/2	26D	MC
1	Entry Lock	PBR8807	626	YA
1	Mortise Cylinder	By Owner		ASSA
1	Wall Stop	409	US32D	RO
1	Silencers	608		RO

Set 06

Doors: B212A

All Hardware by Door Manufacturer.

Set 07

Doors: B202C

3	Hinges	TA2714 4 1/2 x 4 1/2 NRP	26D	MC
1	Storeroom Lock	PBR8805	626	YA
1	Electric Strike	1600	630	HES
1	Mortise Cylinder	By Owner		ASSA
1	Closer	4400	689	YA
1	Wall Stop	409	US32D	RO
1	Smoke Seal	S88		PE

Card Reader, Power Supply, Door Position Switch By Div. 28

Set 08

Doors: B213A

1	Hinge	FM300	630	MA
1	Exit Device	7100F x PB626F	626	YA
1	RIM Cylinder	By Owner		ASSA
1	Closer	4400	689	YA
1	Wall Stop	409	US32D	RO
1	Smoke Seal	S88	S	PE

End of Section